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NASA Contractor Report 3240

NASA TLA Workload Analysis Support

Volume 3 - FFD Autopilot
Scenario Validation Data

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James L. Sundstrom

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NASA TLA Workload Analysis Support

Volume 3 - FFD Autopilot

Scenario Validation Data

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Prepared for
Langley Research Center
under Contract NAS1-13741



National Aeronautics
and Space Administration

**Scientific and Technical
Information Office**

1980

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VOLUME 3 INTRODUCTION

1.0 INTRODUCTION

Volume 3 consists of one set of TLA graphic reports plus the complete data file from which the reports were generated. The reports are complete for both the pilot and copilot. As can be seen in the index the data is presented for the pilot and then the copilot.

The data presented in this volume were used to validate the data construction of the detailed task scenarios. The outputs present two measures of demand workload and a report showing task length and task interaction. The measure of workload are the Workload Histogram (WLH) and the Workload Summary (WLS). The remaining report output is the Mission Timeline.

The Workload Histograms (WLH) provide a picture of peak demand workload for each ten second intervals of the scenario. Demand workload (Wd) is defined to be the level of effort required to perform a task at a specific time. It is calculated with the following formula:

$$Wd = \frac{\text{TIME REQUIRED FOR THE TASK}}{\text{TIME AVAILABLE (INTERNAL)}} \times 100$$

The WLH's provide an easy and convenient way of examining workload and/or comparing workload between scenarios. They also provide an excellent way of identifying areas which may require investigation due to the workload spike or drop.

The Workload Summaries (WLS) provide a picture of average workload, plus one standard deviation by phase of flight. This measure is presented as a barchart. Where the WLH shows the complete scenario workload the WLS

emphasizes workload during the phase. Also, the WLH does not account for the effects of potential workload as indicated by the standard deviation on the WLS graphics.

The last report presented in each grouping of reports is the Mission Timeline (MTL) report. This shows the tasks as they occur in time. Each task is defined as a horizontal bar indicating the time required to perform the task. The major factor shown in the MTL is the interaction of tasks. Primarily this report is used for analysis and report purposes. It is rarely used as a data debugging tool.

The last section of this volume contains a copy of the data file used to generate the Metering and Spacing scenarios and their report outputs.

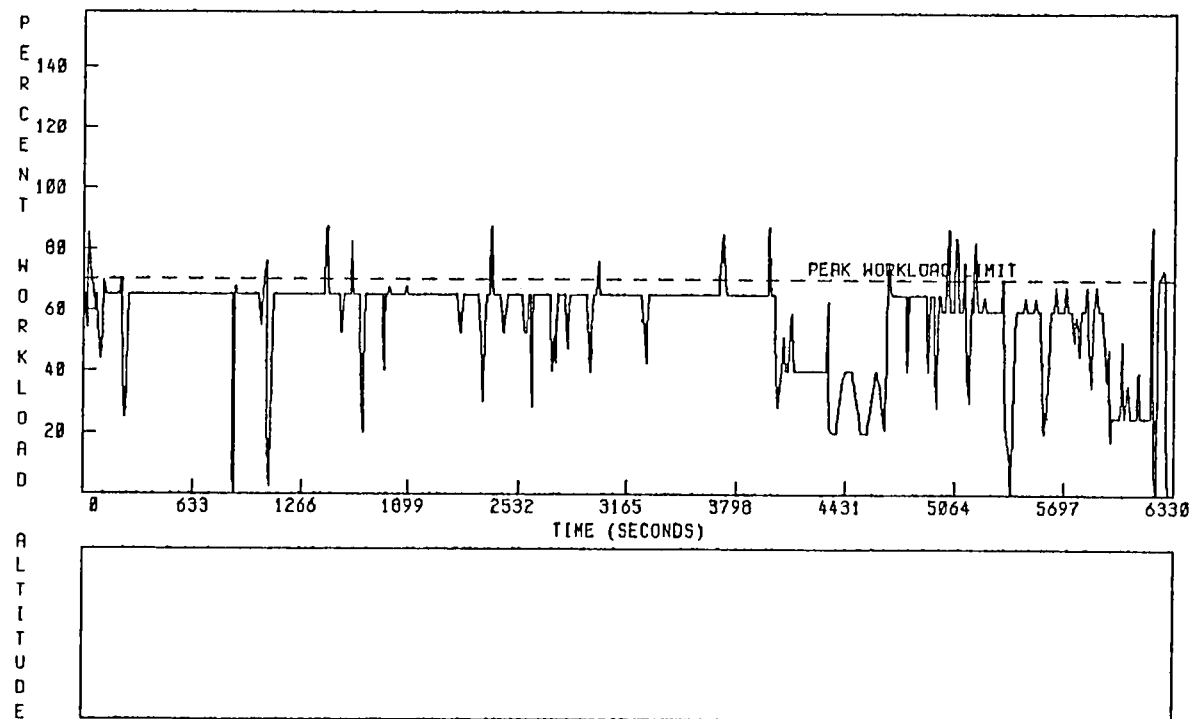
2.0 FORWARD FLIGHT DECK AUTOPILOT SCENARIO VALIDATION DATA

The following section presents the output data used to validate the scenario construction. The data is presented by crewmember and then by report type as indicated in the index.

NOVEM 1978

WORKLOAD HISTOGRAM
CREWMEMBER- PILOT
CHANNEL- TOTAL VISION
CONFIGURATION- NASA 515 - FFD

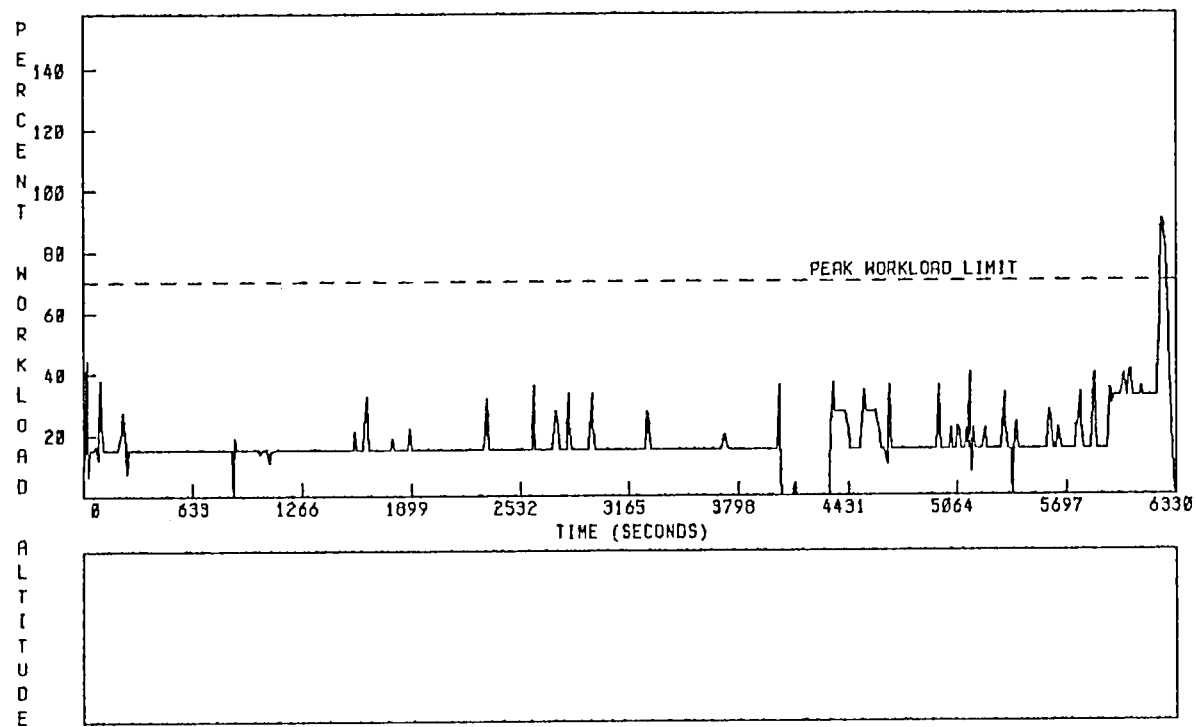
MISSION
MAIN FLT PHASES
MANUAL CONTROL



NOVEM 1978

WORKLOAD HISTOGRAM
CREWMEMBER- PILOT
CHANNEL- TOTAL MOTOR
CONFIGURATION- NASA 515 - FFD

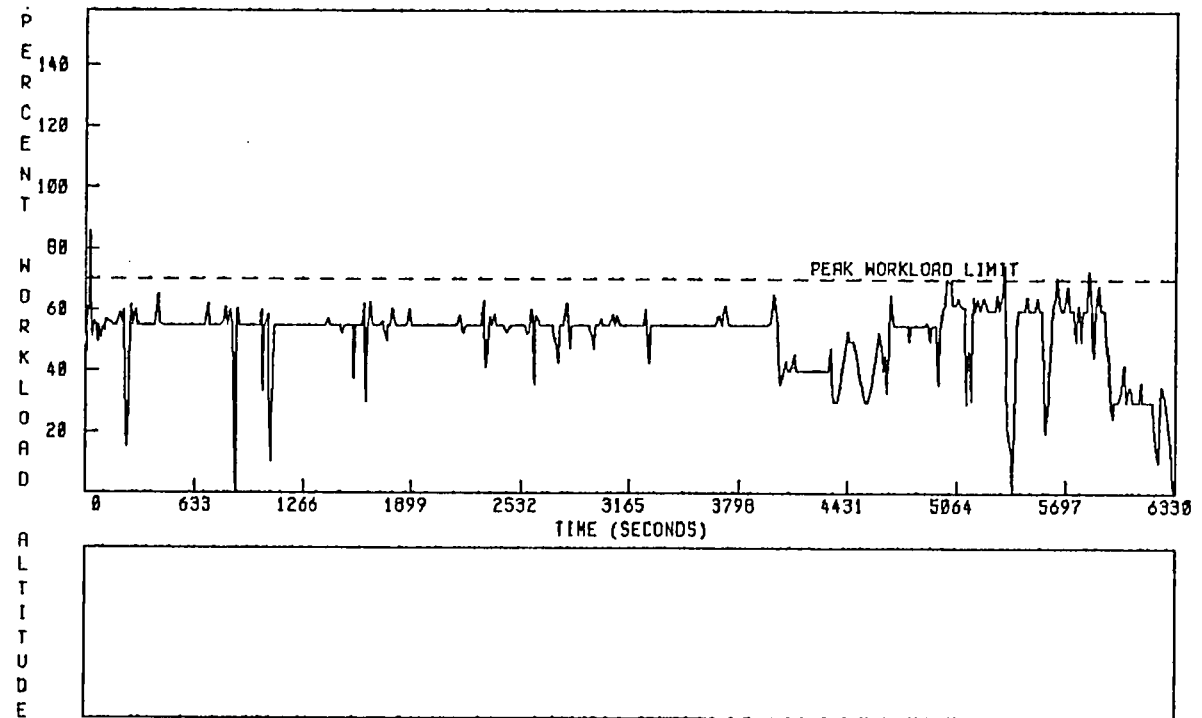
MISSION
MSN11N FLT PHASES
MANUAL CONTROL



NOVEM 1978

WORKLOAD HISTOGRAM
CREWMEMBER- PILOT
CHANNEL- COGNITION
CONFIGURATION- NASA 515 - FFD

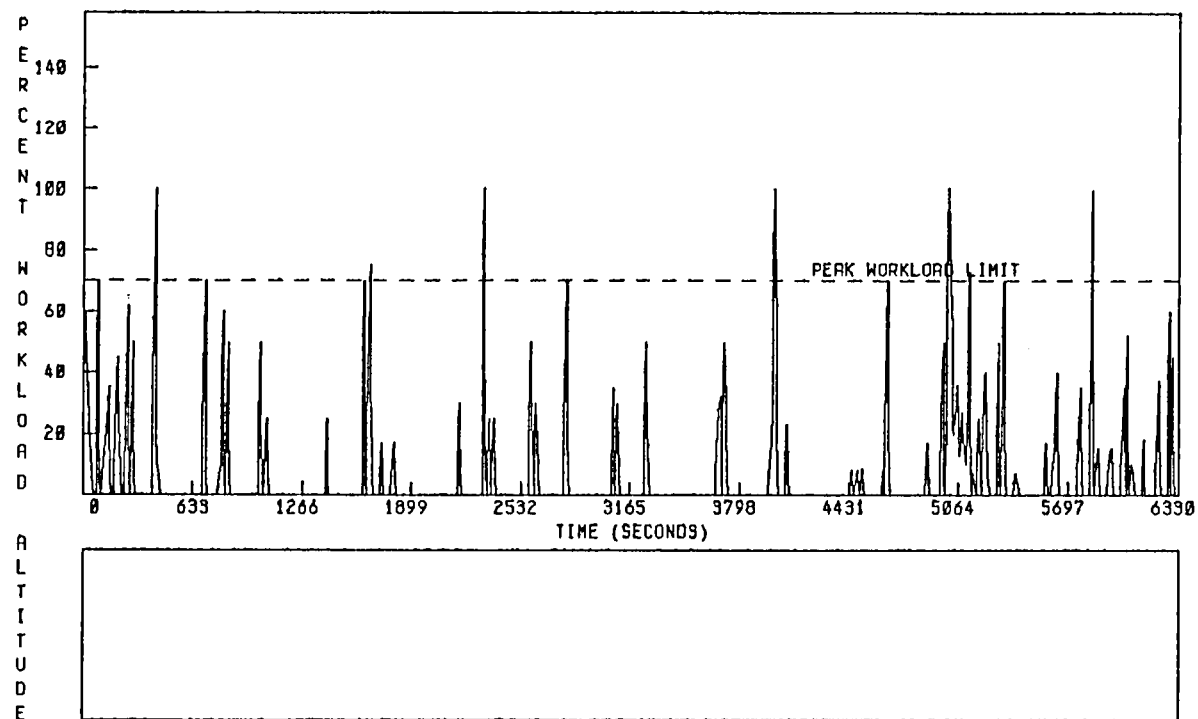
MISSION
MAIN FLT PHASES
MANUAL CONTROL



NOVEM 1978

WORKLOAD HISTOGRAM
CREWMEMBER- PILOT
CHANNEL- TOTAL COMMUNICATION
CONFIGURATION- NASA 515 - FFD

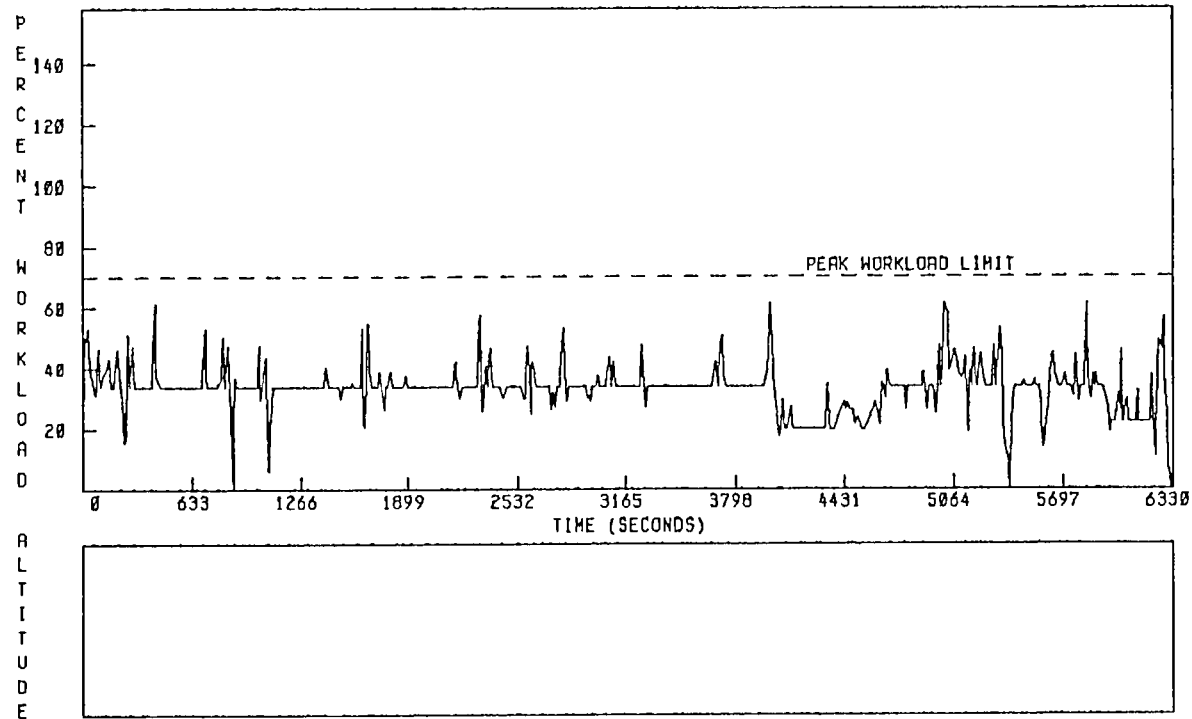
MISSION
MAIN FLT PHASES
MANUAL CONTROL



NOVEM 1978

WORKLOAD HISTOGRAM
CREWMEMBER- PILOT
CHANNEL- WEIGHTED CHANNEL AVERAGE
CONFIGURATION- NASA 515 - FFD

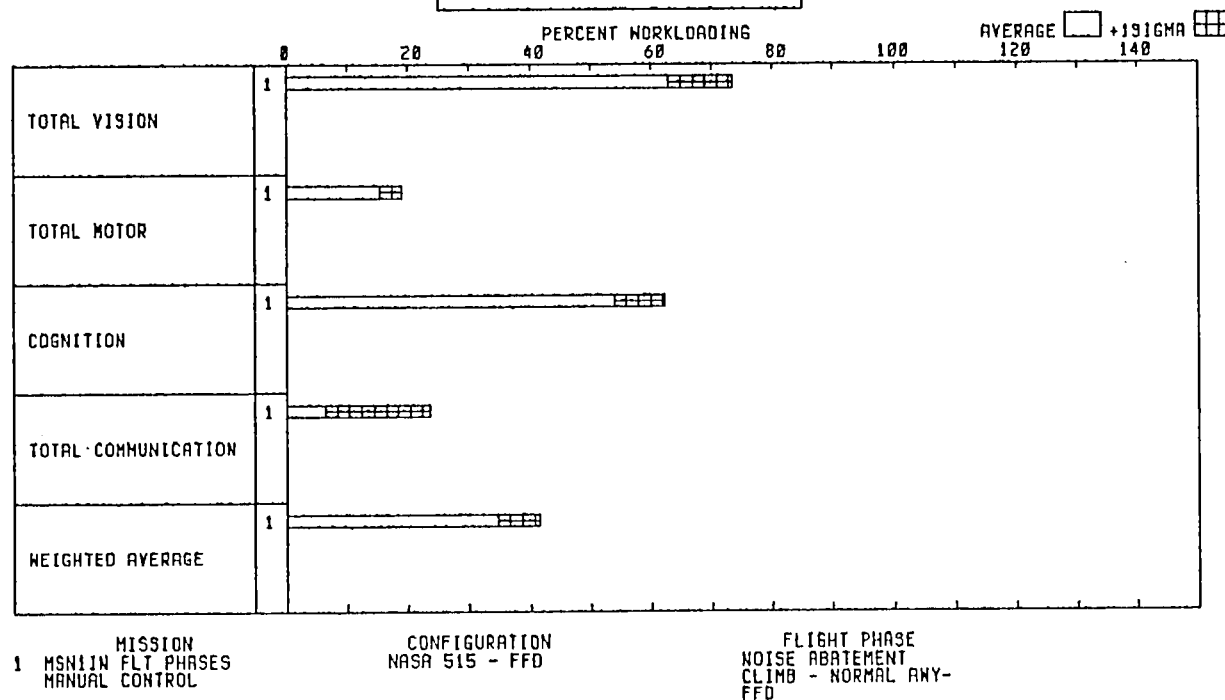
MISSION
MSN11N FLT PHASE3
MANUAL CONTROL

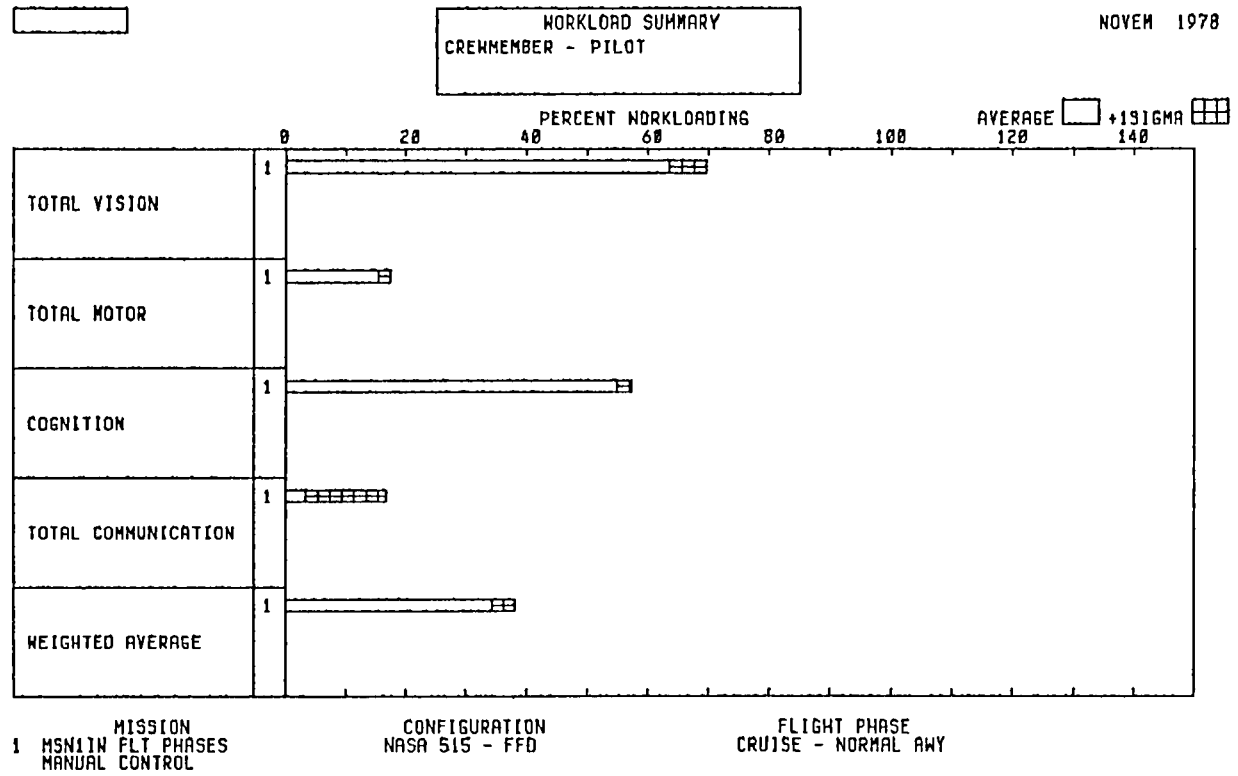


UNSHIFTED

WORKLOAD SUMMARY
CREWMEMBER - PILOT

NOVEM 1978

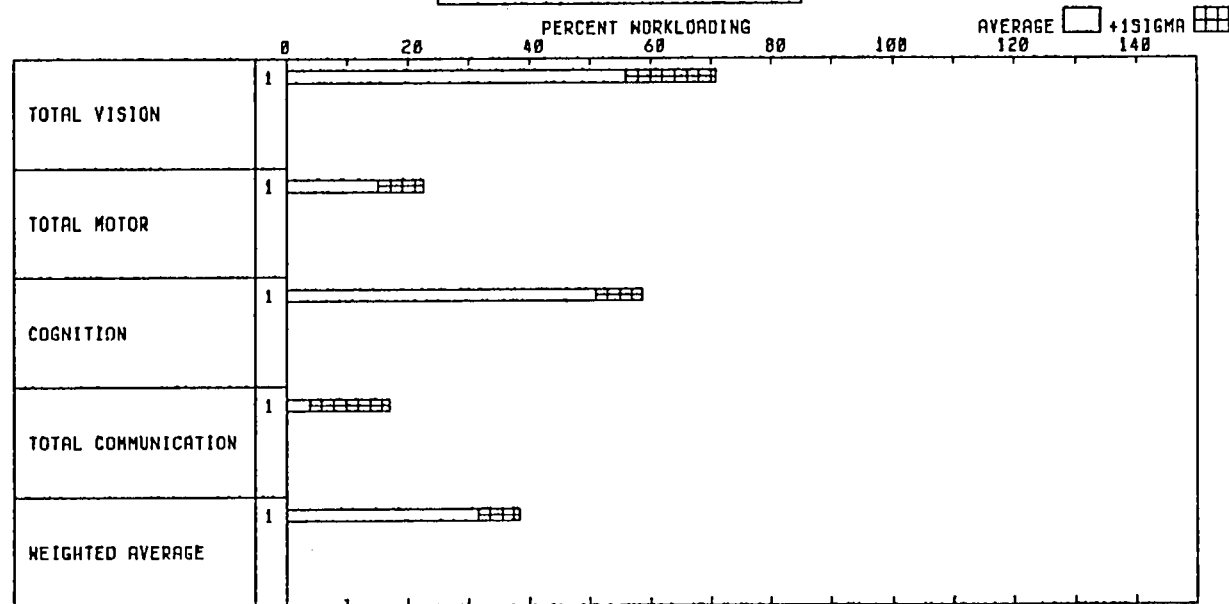




UNSHIFTED

WORKLOAD SUMMARY
CREWMEMBER - PILOT

NOVEM 1978



MISSION
1 MSN11N FLT PHASES
MANUAL CONTROL

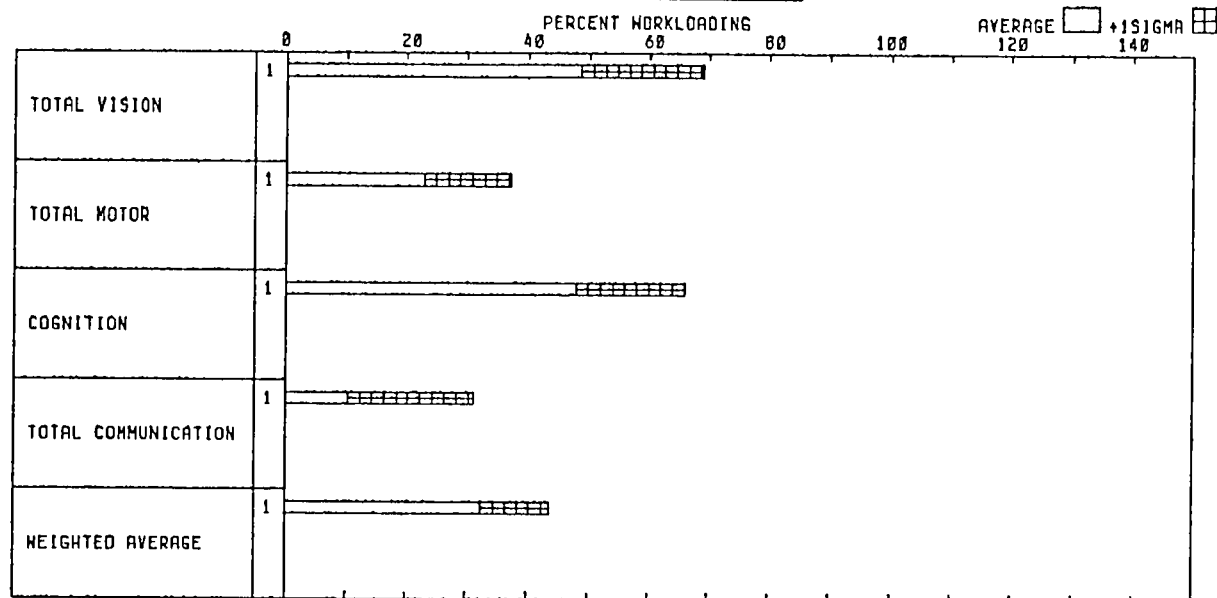
CONFIGURATION
NASA 515 - FFD

FLIGHT PHASE
DESCENT - FFD

UNSHIFTED

WORKLOAD SUMMARY CREWMEMBER - PILOT

NOVEM 1978



MISSION
1 MSN11N FLT PHASES
MANUAL CONTROL

CONFIGURATION
NASA S15 - FFD

FLIGHT PHASE
APP AND LAND - FFD
ILS PROCEDURAL

UNSHIFTED

MISSION TIMELINE
 MISSION - MSN11N FLT PHASES
 MANUAL CONTROL
 CONFIGURATION - NASA 515 - FFD
 FLIGHT PHASE - NOISE ABATEMENT
 CLIMB - NORMAL RWY-
 FFD
 CREWMEMBER - PILOT

NOVEM 1978

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
090001	CONTACT DEPARTURE CONTROL 125.7		
090002	CONTROL AIRCRAFT - A (10 SEC PROC)		
090003	FLIGHT INSTRUMENT SCAN - A		
1B 18	MON VHF-2 COMM AUDIO	6.00	
1P090001	MON RADIO COMM - (NASA 515, CONTACT ATLANTA DEPARTURE ON ONE TWO FIVE POINT)	4.50	
4A 64	MANUALLY CONTROL A/C	10.00	
8A 05	CAPT VIEW THRU NO.1 WINDOW	10.00	
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	
3L 02	MON VERTICAL SPEED INDIC	10.00	
3A 10	MONITOR AIRSPEED INDIC	10.00	
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	
1P090024	SEVEN, GOOD-DAY SIRI	1.50	
090004	CROSS RWY 27R MIDDLE MARKER, TURN TO HDG 105		
090054	HEADING CHANGE PROC. -ATT CWS		
2K 14	MON EHSI DISPLAY	10.00	
2K 33	MON CURVED TREND VECTOR SYMBOLS	10.00	
3L 02	MON VERTICAL SPEED INDIC	10.00	
3V 13	MONITOR MIDDLE MARKER ANNUN LT ON AND AUDIBLE SIGNAL	1.91	

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
4A 28	ACT FLT CONTROL TO CHANGE HDG	10.00	
4A 71	ACT FLT CONTROLS TO CHANGE HDG	2.00	
3S 12	SET HEADING CURSOR ON CI USING HDG CUR- SOR CONT	4.13	
1B 18	MON VHF-2 COMM AUDIO	3.50	
1P090005	MON RADIO COMM - (NASA 515, ATLANTA DEPARTURE, ROGER, SQUAWK IDENT)	3.50	
090005	COMPLETE TURN - ON HDG 105		✓
090054	HEADING CHANGE PROC. -ATT CWS		✓
090003	FLIGHT INSTRUMENT SCAN - A		✓
3L 02	MON VERTICAL SPEED INDIC	10.00	
3A 10	MONITOR AIRSPEED INDIC	10.00	
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	
4A 71	ACT FLT CONTROLS TO CHANGE HDG	2.00	
2K 14	MON EHSI DISPLAY	10.00	
2K 33	MON CURVED TREND VECTOR SYMBOLS	10.00	
3L 02	MON VERTICAL SPEED INDIC	10.00	
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	
1P090006	MON RADIO COMM - (NASA 515, RADAR CONTACT, SAY ALTI- TITUDE, OVER)	3.20	
1B 19	MON VHF-2 COMM AUDIO	3.20	
090002	CONTROL AIRCRAFT - A (10 SEC PROC)		✓
090006	RETRACT FLAPS TO FLAPS 1. SET CLIMB THRUST.		✓
3A 01	MONITOR INDICATED AIRSPEED INDIC	2.37	
4A 64	MANUALLY CONTROL A/C	10.00	

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
8A 05	CAPT VIEW THRU NO.1 WINDOW	10.00	I
090003	FLIGHT INSTRUMENT SCAN - A		▽
3A 10	MONITOR AIRSPEED INDIC	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON C1	10.00	I
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
3L 02	MON VERTICAL SPEED INDIC	10.00	I
1P090022	CALL OUT -[FLAPS]	0.60	I
090002	CONTROL AIRCRAFT - A (10 SEC PROC)		▽
8A 05	CAPT VIEW THRU NO.1 WINDOW	10.00	I
4A 64	MANUALLY CONTROL A/C	10.00	I
1P 07	MON VERBAL REPORT	0.00	I
090003	FLIGHT INSTRUMENT SCAN - A		▽
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
3L 02	MON VERTICAL SPEED INDIC	10.00	I
3A 10	MONITOR AIRSPEED INDIC	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON C1	10.00	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
090002	CONTROL AIRCRAFT - A (10 SEC PROC)		▽
8A 05	CAPT VIEW THRU NO.1 WINDOW	10.00	I
4A 64	MANUALLY CONTROL A/C	10.00	I
090003	FLIGHT INSTRUMENT SCAN - A		▽
3A 10	MONITOR AIRSPEED INDIC	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON C1	10.00	I
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
			0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
3L 02	MON VERTICAL SPEED INDIC	10.00	I
090000	CONTROL AIRCRAFT - B (5 SEC PROC)		▽
0A 05	CAPT VIEW THRU NO.1 WINDOW	5.00	I
4A 64	MANUALLY CONTROL A/C	5.00	I
090009	FLIGHT INSTRUMENT SCAN - B		▽
3R 56	MON PITCH ATTITUDE INDIC ON FOI	5.00	I
3L 02	MON VERTICAL SPEED INDIC	5.00	I
3A 10	MONITOR AIRSPEED INDIC	5.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	5.00	I
090007	REACH 3000 FT ABOVE GROUND LEVEL. BEGIN ACCELERATION TO 250 KIAS. MAINTAIN 500-1000 FT/MIN CLIMB		▽
3H 02	MON CORR BARO ALT INDIC	0.60	I
4B 03	ACTUATE BOTH THROTTLES	2.34	I
090002	CONTROL AIRCRAFT - A (10 SEC PROC)		▽
090003	FLIGHT INSTRUMENT SCAN - A		▽
4A 64	MANUALLY CONTROL A/C	10.00	I
0A 05	CAPT VIEW THRU NO.1 WINDOW	10.00	I
3R 10	MON PITCH ATTITUDE INDIC ON FOI	10.00	I
3L 02	MON VERTICAL SPEED INDIC	10.00	I
3A 10	MONITOR AIRSPEED INDIC	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	I
090000	CONTROL AIRCRAFT - B (5 SEC PROC)		▽
090009	FLIGHT INSTRUMENT SCAN - B		▽

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
3R 56	MON PITCH ATTITUDE INDIC ON FDI	5.00	I
3L 02	MON VERTICAL SPEED INDIC	5.00	I
3A 10	MONITOR AIRSPEED INDIC	5.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	5.00	I
4A 64	MANUALLY CONTROL A/C	5.00	I
0A 05	CAPT VIEW THRU NO.1 WINDOW	5.00	I
090010	RECEIVE INSTRUCTIONS TO TURN TO HDG 070		▽
1B 19	TO INTERCEPT J37	7.00	I
1P090025	MON VHF-2 COMM AUDIO MON RADIO COMM - [NASA 515, FOR VEC- TOR TO INTERCEPT JAY THIRTY SEVEN, TURN CONTROL AIRCRAFT - B (5 SEC PROC)	3.00	I
090008	FLIGHT INSTRUMENT SCAN - B		▽
090009	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	5.00	I
3S 01	MANUALLY CONTROL A/C	5.00	I
4A 64	CAPT VIEW THRU NO.1 WINDOW	5.00	I
0A 05	MON PITCH ATTITUDE INDIC ON FDI	5.00	I
3R 56	MON VERTICAL SPEED INDIC	5.00	I
3L 02	MONITOR AIRSPEED INDIC	5.00	I
3A 10	LEFT HEADING ZERO SEVEN ZERO, CLIMB AND MAINTAIN NINER THOUSAND, OVER]	4.00	I
1P090026	FLIGHT INSTRUMENT SCAN - A		▽
090003	SET HEADING CURSOR ON CI USING HDG CUR- SOR CONT	4.13	I
3S 12	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
3R 10			
			0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
3L 02	MON VERTICAL SPEED INDIC	10.00	I..
3A 10	MONITOR AIRSPEED INDIC	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	I
4A 28	ACT FLT CONTROL TO CHANGE HDG	15.00	I
090009	FLIGHT INSTRUMENT SCAN - B		▽
3A 10	MONITOR AIRSPEED INDIC	5.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	5.00	I
3R 56	MON PITCH ATTITUDE INDIC ON FDI	5.00	I
3L 02	MON VERTICAL SPEED INDIC	5.00	I
090012	COMPLETE TURN - ON HDG 070		▽
090011	RETRACT FLAPS TO FLAPS 0.		▽
090016	CONTROL AIRCRAFT - C (SEC PROC)		▽
090017	FLIGHT INSTRUMENT SCAN - C		▽
3A 10	MONITOR AIRSPEED INDIC	30.00	0
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	30.00	0
4A 64	MANUALLY CONTROL A/C	30.00	0
8A 05	CAPT VIEW THRU NO.1 WINDOW	30.00	0
3R 56	MON PITCH ATTITUDE INDIC ON FDI	30.00	0
3L 02	MON VERTICAL SPEED INDIC	30.00	0
1P090022	CALL OUT -[FLAPS]	0.60	I
090013	REACH 250 KIAS		▽
1P 07	NON VERBAL REPORT	0.00	I
1P 03	ACKNOWLEDGE	0.50	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
090014	AFTER TAKEOFF CHECK- LIST		▽
1P090017	CALL OUT- [AFTER TAKEOFF CHECKLIST]	1.20	I
1P090018	CALL OUT- [START SWITCHES]	0.90	I
1P 06 090018	MON VERBAL REPORT CONTROL AIRCRAFT - D (60 SEC PROC)	0.50	I ▽
090019	FLIGHT INSTRUMENT SCAN - D		▽
3A 10	MONITOR AIRSPEED INDIC	60.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON C1	60.00	□
1P 11 4A 65 8A 05	MON VERBAL REPORT MANUALLY CONTROL A/C CAPT VIEW THRU NO.1 WINDOW	0.90 60.00 60.00	I □ □
3R 56	MON PITCH ATTITUDE INDIC ON FDI	60.00	□
3L 02	MON VERTICAL SPEED INDIC	60.00	□
1P 06 1P 10 1P 06 1P 09	MON VERBAL REPORT MON VERBAL REPORT MON VERBAL REPORT MON VERBAL REPORT	1.00 0.60 1.00 1.90	I I I I
090002	CONTROL AIRCRAFT - A (10 SEC PROC)		▽
090003	FLIGHT INSTRUMENT SCAN - A		▽
090015	RECEIVE CLEARANCE TO CLIMB TO 12000 FT		▽
3L 02	MON VERTICAL SPEED INDIC	10.00	I
3A 10	MONITOR AIRSPEED INDIC	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON C1	10.00	I
1B 10 1P090029	MON VHF-2 COMM AUDIO MON RADIO COMM [NASA 515, CLIMB AND MAINTAIN ONE TWO THOUSAND, OVER]	3.50 3.50	I I
4A 64	MANUALLY CONTROL A/C	10.00	I

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
0A 05	CAPT VIEW THRU NO.1 WINDOW	10.00	I
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
1P 04	MON VERBAL REPORT	2.00	I
090002	CONTROL AIRCRAFT - A (10 SEC PROC)		▽
090003	FLIGHT INSTRUMENT SCAN - A		▽
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
3L 02	MON VERTICAL SPEED INDIC	10.00	I
3A 10	MONITOR AIRSPEED INDIC	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	I
4A 64	MANUALLY CONTROL A/C	10.00	I
0A 05	CAPT VIEW THRU NO.1 WINDOW	10.00	I
090020	REACH 10000FT. BEGIN TURN TO HDG 053.		▽
090003	FLIGHT INSTRUMENT SCAN - A		▽
3A 10	MONITOR AIRSPEED INDIC	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	I
4A 20	ACT FLT CONTROL TO CHANGE HDG	20.00	0
0A 00	CAPT VIEW THRU NO 1	20.00	0
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
3L 02	MON VERTICAL SPEED INDIC	10.00	I
090000	CONTROL AIRCRAFT - B (5 SEC PROC)		▽
4A 64	MANUALLY CONTROL A/C	5.00	I
0A 05	CAPT VIEW THRU NO.1 WINDOW	5.00	I

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
090018	CONTROL AIRCRAFT - D (60 SEC PROC)		▽
090019	FLIGHT INSTRUMENT SCAN - D		▽
8A 05	CAPT VIEW THRU NO.1 WINDOW	60.00	□
3R 56	MON PITCH ATTITUDE INDIC ON FDI	60.00	□
3L 02	MON VERTICAL SPEED INDIC	60.00	□
9A 10	MONITOR AIRSPEED INDIC	60.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	60.00	□
4A 65 090023	MANUALLY CONTROL A/C HANDOFF TO ATLANTA EAST DEPARTURE SEC- TOR. -123.95	60.00	□ ▽
1P090000	MON RADIO COMM- (NASA 515, CLIMB AND MAINTAIN FLIGHT LVL 230. CONTACT ATLANTA	3.10	I
1B 19 1P090009	MON VHF-2 COMM AUDIO CENTER ON ONE TWO THREE POINT NINER FIVE, OVER]	6.20 3.10	I I
1B 18 1P090014	MON VHF-2 COMM AUDIO MON RADIO COMM - [NASA 515, THIS IS ATLANTA CENTER, ROGER. SQUAWK IDENT]	3.50 3.50	I I
1B 18 1P090015	MON VHF-2 COMM AUDIO MON RADIO COMM - [NASA 515, RADAR CONTACT. REPORT LEAVING FL210, OVER]	3.50 3.50	I I
090018	CONTROL AIRCRAFT - D (60 SEC PROC)		▽
090019	FLIGHT INSTRUMENT SCAN - D		▽
9A 10	MONITOR AIRSPEED INDIC	60.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	60.00	□
4A 65	MANUALLY CONTROL A/C	60.00	□

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
0A 05	CAPT VIEW THRU NO.1 WINDOW	60.00	□
3R 56	MON PITCH ATTITUDE INDIC ON FOI	60.00	□
3L 02	MON VERTICAL SPEED INDIC	60.00	□
090010	CONTROL AIRCRAFT - D (60 SEC PROC)		▽
090019	FLIGHT INSTRUMENT SCAN - D		▽
4A 65	MANUALLY CONTROL A/C	60.00	□
0A 05	CAPT VIEW THRU NO.1 WINDOW	60.00	□
3R 56	MON PITCH ATTITUDE INDIC ON FOI	60.00	□
3L 02	MON VERTICAL SPEED INDIC	60.00	□
3A 10	MONITOR AIRSPEED INDIC	60.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON C1	60.00	□
090025	RECEIVE NOTICE OF CONFLICTING TRAFFIC		▽
1B 19	MON VHF-2 COMM AUDIO	10.00	I
1P090031	MON RADIO COMM - (NASA 515, MAINTAIN FLIGHT LEVEL ONE EIGHT ZERO. TRAFFIC	3.75	I
1P090032	TWELVE O'CLOCK, FOUR MILES, NORTHEAST BOUND, C-130 ASSIGNED FLIGHT LEVEL ONE	5.00	I
1P090033	NINER ZERO, OVER]	1.25	I
090016	CONTROL AIRCRAFT - C (SEC PROC)		▽
090017	FLIGHT INSTRUMENT SCAN - C		▽
3L 02	MON VERTICAL SPEED INDIC	30.00	0
3A 10	MONITOR AIRSPEED INDIC	30.00	0
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON C1	30.00	0
4A 64	MANUALLY CONTROL A/C	30.00	0

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
8A 05	CAPT VIEW THRU NO.1 WINDOW	30.00	0
3R 56	MON PITCH ATTITUDE INDIC ON FDI	30.00	0
090026	BEGIN 500 FT/MIN RATE OF CLIMB		▽
140023	REPORT 1000 FT TO LEVEL OFF		▽
1P 11	MON VERBAL REPORT	1.70	1
090002	CONTROL AIRCRAFT - A (10 SEC PROC)		▽
090003	FLIGHT INSTRUMENT SCAN - A		▽
8A 05	CAPT VIEW THRU NO.1 WINDOW	10.00	1
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	1
3L 02	MON VERTICAL SPEED INDIC	10.00	1
3A 10	MONITOR AIRSPEED INDIC	10.00	1
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON C1	10.00	1
4A 64	MANUALLY CONTROL A/C	10.00	1
090008	CONTROL AIRCRAFT - B (5 SEC PROC)		▽
090009	FLIGHT INSTRUMENT SCAN - B		▽
3L 02	MON VERTICAL SPEED INDIC	5.00	1
3A 10	MONITOR AIRSPEED INDIC	5.00	1
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON C1	5.00	1
4A 64	MANUALLY CONTROL A/C	5.00	1
8A 05	CAPT VIEW THRU NO.1 WINDOW	5.00	1
3R 56	MON PITCH ATTITUDE INDIC ON FDI	5.00	1
090027	LEVEL OFF AT 10000		▽
090018	CONTROL AIRCRAFT - D (60 SEC PROC)		▽
090019	FLIGHT INSTRUMENT SCAN - D		▽

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE		EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS	
3S	15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON C1	60.00	<input type="checkbox"/>	
4A	65	MANUALLY CONTROL A/C	60.00	<input type="checkbox"/>	
8A	05	CAPT VIEW THRU NO.1 WINDOW	60.00	<input type="checkbox"/>	
3R	56	MON PITCH ATTITUDE	60.00	<input type="checkbox"/>	
3L	02	INDIC ON FDI	60.00	<input type="checkbox"/>	
3A	10	MON VERTICAL SPEED	60.00	<input type="checkbox"/>	
		INDIC		<input type="checkbox"/>	
		MONITOR AIRSPEED	60.00	<input type="checkbox"/>	
		INDIC		<input type="checkbox"/>	
090018		CONTROL AIRCRAFT - D (60 SEC PROC)		<input type="checkbox"/>	
090019		FLIGHT INSTRUMENT SCAN - D		<input type="checkbox"/>	
3R	56	MON PITCH ATTITUDE	60.00	<input type="checkbox"/>	
3L	02	INDIC ON FDI	60.00	<input type="checkbox"/>	
		MON VERTICAL SPEED	60.00	<input type="checkbox"/>	
		INDIC		<input type="checkbox"/>	
3A	10	MONITOR AIRSPEED	60.00	<input type="checkbox"/>	
		INDIC		<input type="checkbox"/>	
3S	15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON C1	60.00	<input type="checkbox"/>	
4A	65	MANUALLY CONTROL A/C	60.00	<input type="checkbox"/>	
8A	05	CAPT VIEW THRU NO.1 WINDOW	60.00	<input type="checkbox"/>	
090018		CONTROL AIRCRAFT - D (60 SEC PROC)		<input type="checkbox"/>	
090019		FLIGHT INSTRUMENT SCAN - D		<input type="checkbox"/>	
3A	10	MONITOR AIRSPEED	60.00	<input type="checkbox"/>	
		INDIC		<input type="checkbox"/>	
3S	15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON C1	60.00	<input type="checkbox"/>	
4A	65	MANUALLY CONTROL A/C	60.00	<input type="checkbox"/>	
8A	05	CAPT VIEW THRU NO.1 WINDOW	60.00	<input type="checkbox"/>	
3R	56	MON PITCH ATTITUDE	60.00	<input type="checkbox"/>	
		INDIC ON FDI		<input type="checkbox"/>	
3L	02	MON VERTICAL SPEED	60.00	<input type="checkbox"/>	
		INDIC		<input type="checkbox"/>	
090016		CONTROL AIRCRAFT - D (SEC PROC)		<input type="checkbox"/>	

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
090017	FLIGHT INSTRUMENT SCAN - C		▽
4A 64	MANUALLY CONTROL A/C	30.00	0
8A 05	CAPT VIEW THRU NO.1 WINDOW	30.00	0
3R 56	MON PITCH ATTITUDE	30.00	0
3L 02	INDIC ON FDI	30.00	0
3A 10	MON VERTICAL SPEED	30.00	0
3S 01	INDIC	30.00	0
	MONITOR AIRSPEED	30.00	0
	INDIC	30.00	0
	MONITOR A/C HEADING	30.00	0
	RELATIVE TO SELECTED HDG ON CI		0
090016	CONTROL AIRCRAFT - C (60 SEC PROC)		▽
090017	FLIGHT INSTRUMENT SCAN - C		▽
3R 56	MON PITCH ATTITUDE	30.00	0
3L 02	INDIC ON FDI	30.00	0
3A 10	MON VERTICAL SPEED	30.00	0
3S 01	INDIC	30.00	0
	MONITOR AIRSPEED	30.00	0
	INDIC	30.00	0
	MONITOR A/C HEADING	30.00	0
	RELATIVE TO SELECTED HDG ON CI		0
4A 64	MANUALLY CONTROL A/C	30.00	0
8A 05	CAPT VIEW THRU NO.1 WINDOW	30.00	0
090020	RECEIVE CLEARANCE TO RESUME CLIMB TO CRUISE ALTITUDE		▽
1B 19	MON VHF-2 COMM AUDIO	7.00	I
1P090036	MON RADIO COMM - [NASA 515, CLEAR OF TRAFFIC, CLIMB AND MAINTAIN FLIGHT	3.00	I
1P090037	LEVEL TWO THREE ZERO - REPORT LEAVING FLIGHT LEVEL TWO ONE ZERO, OVER]	4.00	I
090018	CONTROL AIRCRAFT - C (60 SEC PROC)		▽
090019	FLIGHT INSTRUMENT SCAN - C		▽

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	60.00	□
4A 65	MANUALLY CONTROL A/C	60.00	□
8A 05	CAPT VIEW THRU NO.1 WINDOW	60.00	□
3R 56	MON PITCH ATTITUDE INDIC ON FDI	60.00	□
3L 02	MON VERTICAL SPEED INDIC	60.00	□
3A 10	MONITOR AIRSPEED INDIC	60.00	□
090018	CONTROL AIRCRAFT - D (60 SEC PROC)		▽
090019	FLIGHT INSTRUMENT SCAN - D		▽
8A 05	CAPT VIEW THRU NO.1 WINDOW	60.00	□
3R 56	MON PITCH ATTITUDE INDIC ON FDI	60.00	□
3L 02	MON VERTICAL SPEED INDIC	60.00	□
3A 10	MONITOR AIRSPEED INDIC	60.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	60.00	□
4A 65 090029	MANUALLY CONTROL A/C CLIMB THRU 23000 FT. HANDOFF TO SPARTANBURG HIGH SECTOR -133.7	60.00	□ ▽
1B 19 1P090041	MON VHF-2 COMM AUDIO MON RADIO COMM - [NASA 515, ROGER. CLIMB AND MAINTAIN FLIGHT LEVEL THREE	7.00 3.50	I I
1P090042	ONE ZERO. CONTACT CENTER ON ONE THREE THREE POINT SEVEN, OVER]	9.50	I
1B 19 1P090047	MON VHF-2 COMM AUDIO MON RADIO COMM - [NASA 515, ATLANTA CENTER. ROGER. SQUAWK IDENT. REPORT	7.00 3.70	I I

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
090016	CONTROL AIRCRAFT - C (SEC PROC)		▽
090017	FLIGHT INSTRUMENT SCAN - C		▽
3A 10	MONITOR AIRSPEED INDIC	30.00	□
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	30.00	□
4A 64	MANUALLY CONTROL A/C	30.00	□
8A 05	CAPT VIEW THRU NO.1 WINDOW	30.00	□
3R 56	MON PITCH ATTITUDE INDIC ON FDI	30.00	□
3L 02	MON VERTICAL SPEED INDIC	30.00	□
1P090040	LEAVING FLIGHT LEVEL TWO EIGHT ZERO, OVER]	3.90	I
090030	BEGIN MACH 0.65 SPEED SCHEDULE		▽
090018	CONTROL AIRCRAFT - D (60 SEC PROC)		▽
090019	FLIGHT INSTRUMENT SCAN - D		▽
3A 10	MONITOR AIRSPEED INDIC	60.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	60.00	□
3F 01	MON MACH NO INDIC	2.37	I
4B 03	ACTUATE BOTH THROTTLES	2.02	I
4A 65	MANUALLY CONTROL A/C	60.00	□
8A 05	CAPT VIEW THRU NO.1 WINDOW	60.00	□
3R 56	MON PITCH ATTITUDE INDIC ON FDI	60.00	□
3L 02	MON VERTICAL SPEED INDIC	60.00	□
090018	CONTROL AIRCRAFT - D (60 SEC PROC)		▽
090019	FLIGHT INSTRUMENT SCAN - D		▽
3L 02	MON VERTICAL SPEED INDIC	60.00	□

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
3A 10	MONITOR AIRSPEED INDIC	60.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	60.00	□
4A 65	MANUALLY CONTROL A/C	60.00	□
8A 05	CAPT VIEW THRU NO.1 WINDOW	60.00	□
3R 56	MON PITCH ATTITUDE INDIC ON FDI	60.00	□
090016	CONTROL AIRCRAFT - C (SEC PROC)		▽
090017	FLIGHT INSTRUMENT SCAN - C		▽
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	30.00	□
4A 64	MANUALLY CONTROL A/C	30.00	□
8A 05	CAPT VIEW THRU NO.1 WINDOW	30.00	□
3R 56	MON PITCH ATTITUDE INDIC ON FDI	30.00	□
3L 02	MON VERTICAL SPEED INDIC	30.00	□
3A 10	MONITOR AIRSPEED INDIC	30.00	□
090031	CLIMB THRU 20000 FT. REPORT TO ATC.		▽
1B 20	MON VHF-2 COMM AUDIO	5.00	I
1P090051	MON RADIO COMM- (NASA SIS, ROGER. CLIMB AND MAINTAIN FLIGHT LEVEL TWO NINER ZERO, OVER)	3.50	I
1P090052	REDUCE RATE OF CLIMB TO 500 FT/MIN	1.50	I
090032	ACTUATE BOTH THROTTLES		▽
4B 03	MON VERTICAL SPEED INDIC	2.44	I
3L 01	REPORT 1000 FT TO LEVEL OFF	2.24	I
140023	CONTROL AIRCRAFT - C (SEC PROC)		▽
090016	FLIGHT INSTRUMENT SCAN - C		▽
090017			▽

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
9L 02	MON VERTICAL SPEED INDIC	30.00	0
3A 10	MONITOR AIRSPEED INDIC	30.00	0
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	30.00	0
4A 64	MANUALLY CONTROL A/C	30.00	0
8A 05	CAPT VIEW THRU NO.1 WINDOW	30.00	0
3R 56	MON PITCH ATTITUDE INDIC ON FOI	30.00	0
1P 11	MON VERBAL REPORT	1.70	1
090033	TUNE AND MONITOR SPARTANBURG VOR -115.7		▽
1P 12	MON VERBAL REPORT	2.50	1
090008	CONTROL AIRCRAFT - B (5 SEC PROC)		▽
090009	FLIGHT INSTRUMENT SCAN - 0		▽
8A 05	CAPT VIEW THRU NO.1 WINDOW	5.00	1
3R 56	MON PITCH ATTITUDE INDIC ON FOI	5.00	1
3L 02	MON VERTICAL SPEED INDIC	5.00	1
3A 10	MONITOR AIRSPEED INDIC	5.00	1
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	5.00	1
4A 64	MANUALLY CONTROL A/C	5.00	1
5G 05	MON VOR POINTER NO.2 ON VOR/RMI 1 INDIC	2.25	1
090034	LEVEL OFF AT 29000 FT. ACCELERATE TO LONG RANGE CRUISE SPEED -MACH 0.67		▽
4A 64	MANUALLY CONTROL A/C	10.00	1
3H 06	MON ALTIMETER	10.00	1
4A 64	MANUALLY CONTROL A/C	5.00	1
3F 01	MON MACH NO INDIC	2.37	1
4B 03	ACTUATE BOTH THROTTLES	2.02	1
090035	REACH MACH 0.67		▽
3F 01	MON MACH NO INDIC	2.37	1

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
4B 03	ACTUATE BOTH THROTTLES	2.02	I
4B 03	ACTUATE BOTH THROTTLES	2.02	I
9F 01	MON MACH NO INDIC	2.37	I
090036	CONTROL AIRCRAFT - E (0 SEC PROC)		▽
090037	FLIGHT INSTRUMENT SCAN - E		▽
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON C1	90.00	□
4A 65	MANUALLY CONTROL A/C	300.00	□
0A 06	CAPT VIEW THRU NO.1 WINDOW	300.00	□
3R 56	MON PITCH ATTITUDE INDIC ON FDI	90.00	□
3L 03	MON VERTICAL SPEED INDIC	90.00	□
3A 11	MONITOR AIRSPEED INDIC	90.00	□
090037	FLIGHT INSTRUMENT SCAN - E		▽
3L 03	MON VERTICAL SPEED INDIC	90.00	□
3A 11	MONITOR AIRSPEED INDIC	90.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON C1	90.00	□
3R 56	MON PITCH ATTITUDE INDIC ON FDI	90.00	□
090039	FLIGHT INSTRUMENT SCAN - F		▽
3A 11	MONITOR AIRSPEED INDIC	120.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON C1	120.00	□
3R 57	MON PITCH ATTITUDE INDIC ON FDI	120.00	□
3L 03	MON VERTICAL SPEED INDIC	120.00	□
090038	CONTROL AIRCRAFT - F (120 SEC PROC)		▽
090039	FLIGHT INSTRUMENT SCAN - F		▽

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
090040	TUNE TO GORDONVILLE VOR -115.6		▽
3L 03	MON VERTICAL SPEED INDIC	120.00	□
3A 11	MONITOR AIRSPEED INDIC	120.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	120.00	□
4A 65	MANUALLY CONTROL A/C	120.00	□
0A 06	CAPT VIEW THRU NO.1 WINDOW	110.00	□
3R 57	MON PITCH ATTITUDE INDIC ON FDI	120.00	□
1P 12	MON VERBAL REPORT	2.50	I
5G 04	MON VOR POINTER NO.1 ON VOR/RMI 1 INDIC	2.25	I
090018	CONTROL AIRCRAFT - D (60 SEC PROC)		▽
090019	FLIGHT INSTRUMENT SCAN - D		▽
4A 65	MANUALLY CONTROL A/C	60.00	□
0A 05	CAPT VIEW THRU NO.1 WINDOW	60.00	□
3R 56	MON PITCH ATTITUDE INDIC ON FDI	60.00	□
3L 02	MON VERTICAL SPEED INDIC	60.00	□
3A 10	MONITOR AIRSPEED INDIC	60.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	60.00	□
090041	CROSS SPARTANBURG VOR. TURN TO HDG 047		▽
3S 04	MON A/C POSITION RELATIVE TO SELECTED COURSE ON CI	5.00	I
4A 28	ACT FLT CONTROL TO CHANGE HDG	5.00	I
090016	CONTROL AIRCRAFT - D (SEC PROC)		▽
090017	FLIGHT INSTRUMENT SCAN - C		▽
3L 02	MON VERTICAL SPEED INDIC	30.00	□

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
3A 10	MONITOR AIRSPEED INDIC	30.00	0
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	30.00	0
4A 64	MANUALLY CONTROL A/C	30.00	0
8A 05	CAPT VIEW THRU NO.1 WINDOW	30.00	0
3R 56	MON PITCH ATTITUDE INDIC ON FDI	30.00	0
090002	CONTROL AIRCRAFT - A (10 SEC PROC)		▽
090003	FLIGHT INSTRUMENT SCAN - A		▽
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	I
4A 64	MANUALLY CONTROL A/C	10.00	I
8A 05	CAPT VIEW THRU NO.1 WINDOW	10.00	I
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
3L 02	MON VERTICAL SPEED INDIC	10.00	I
3A 10	MONITOR AIRSPEED INDIC	10.00	I
090042	TURN COMPLETE - ON HDG 047.		▽
090002	CONTROL AIRCRAFT - A (10 SEC PROC)		▽
090003	FLIGHT INSTRUMENT SCAN - A		▽
8A 05	CAPT VIEW THRU NO.1 WINDOW	10.00	I
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
3L 02	MON VERTICAL SPEED INDIC	10.00	I
3A 10	MONITOR AIRSPEED INDIC	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	I
4A 64	MANUALLY CONTROL A/C	10.00	I
090002	CONTROL AIRCRAFT - A (10 SEC PROC)		▽
			0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
090003	FLIGHT INSTRUMENT SCAN - A		▽
090043	RECEIVE CLEARANCE TO CLIMB TO 33000 FT		▽
4A 64	MANUALLY CONTROL A/C	10.00	I
0A 05	CAPT VIEW THRU NO.1 WINDOW	10.00	I
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
3L 02	MON VERTICAL SPEED INDIC	10.00	I
3A 10	MONITOR AIRSPEED INDIC	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	I
1B 19	MON VHF-2 COMM AUDIO	7.00	I
1P090054	MON RADIO COMM - ENASA 515, CLIMB AND MAINTAIN FLIGHT LVL THREE THREE ZERO.	3.50	I
1P090055	CONTACT CENTER ON ONE THREE FOUR POINT FIVE FIVE, OVER)	3.50	I
090044	BEGIN CLIMB TO 33000 FT.		▽
3L 02	MON VERTICAL SPEED INDIC	10.00	I
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
4A 29	ACT FLT CONTROL TO CHANGE ALT	10.00	I
090030	CONTROL AIRCRAFT - F (120 SEC PROC)		▽
090039	FLIGHT INSTRUMENT SCAN - F		▽
3R 57	MON PITCH ATTITUDE INDIC ON FDI	120.00	□
3L 03	MON VERTICAL SPEED INDIC	120.00	□
3A 11	MONITOR AIRSPEED INDIC	120.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	120.00	□
4A 65	MANUALLY CONTROL A/C	120.00	□

0. 500. 1000. 1500. 2000. 2500. 3000.

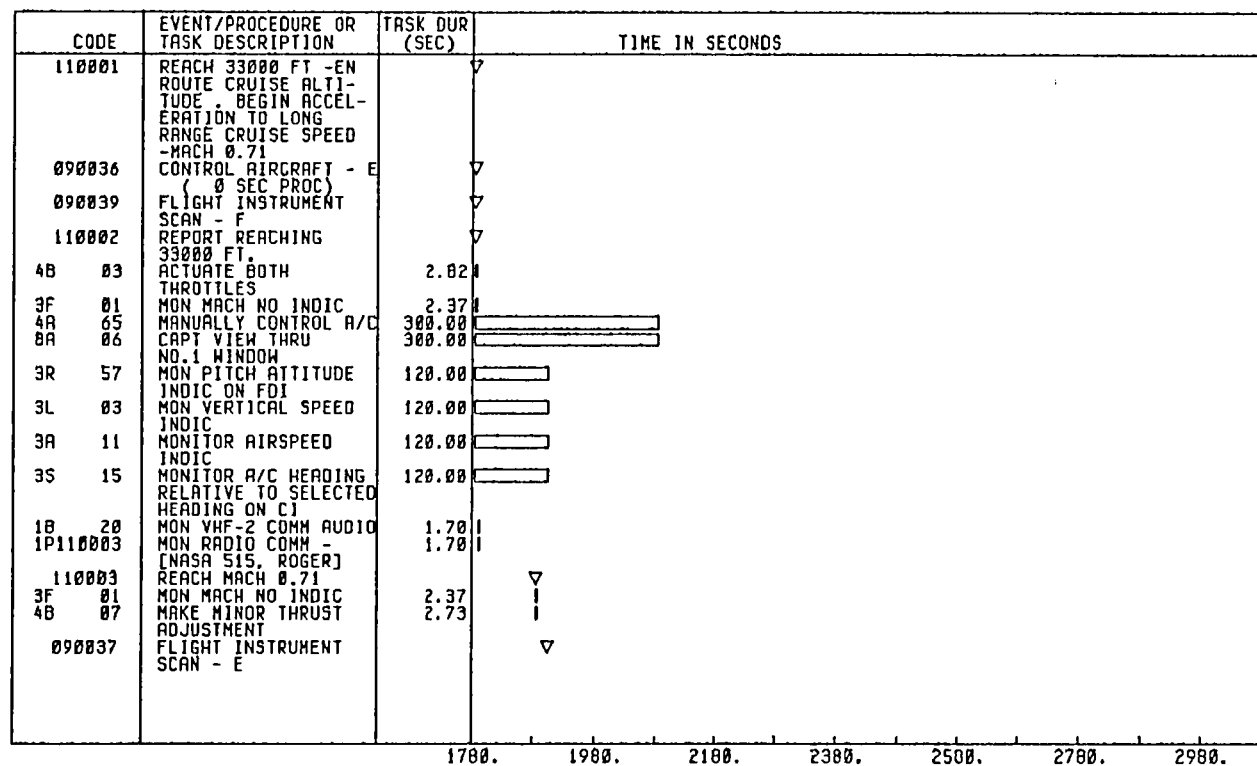
CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
8A 06	CAPT VIEW THRU NO.1 WINDOW	110.00	
1P090060	MON RADIO COMM - [NASA 515, ATLANTA CENTER, ROGER. SQUAWK IDENT	3.50	
1B 10	MON VHF-2 COMM AUDIO	3.50	
1P090061	MON RADIO COMM - [NASA 515, RADAR CONTACT. REPORT LEVEL AT FLIGHT	3.50	
1B 20	MON VHF-2 COMM AUDIO	5.50	
1P090062	LEVEL THREE THREE ZERO. OVER]	2.00	
090045	CLIMB THRU 32000 FT. BEGIN 500 FT/MIN RATE OF CLIMB.		
1P 11	MON VERBAL REPORT CONTROL AIRCRAFT - A (10 SEC PROC)	1.70	
090003	FLIGHT INSTRUMENT SCAN - A		
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	
4A 64	MANUALLY CONTROL A/C	10.00	
8A 05	CAPT VIEW THRU NO.1 WINDOW	10.00	
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	
3L 02	MON VERTICAL SPEED INDIC	10.00	
3A 10	MONITOR AIRSPEED INDIC	10.00	
090002	CONTROL AIRCRAFT - A (10 SEC PROC)		
090003	FLIGHT INSTRUMENT SCAN - A		
8A 05	CAPT VIEW THRU NO.1 WINDOW	10.00	
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	
3L 02	MON VERTICAL SPEED INDIC	10.00	
3A 10	MONITOR AIRSPEED INDIC	10.00	

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	I
4A 64 090000	MANUALLY CONTROL A/C CONTROL AIRCRAFT - B (5 SEC PROC)	10.00	I V
090009	FLIGHT INSTRUMENT SCAN - B		V
3L 02	MON VERTICAL SPEED INDIC	5.00	I
3A 10	MONITOR AIRSPEED INDIC	5.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	5.00	I
4A 64	MANUALLY CONTROL A/C	5.00	I
0A 05	CAPT VIEW THRU NO.1 WINDOW	5.00	I
3R 56	MON PITCH ATTITUDE INDIC ON FOI	5.00	I
			0. 500. 1000. 1500. 2000. 2500. 3000.

MISSION TIMELINE
 MISSION - MSN11N FLT PHASES
 MANUAL CONTROL
 CONFIGURATION - NASA 515 - FFD
 FLIGHT PHASE - CRUISE - NORMAL AWAY
 CREWMEMBER - PILOT

NOVEM 1978



CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
3L 03	MON VERTICAL SPEED INDIC	90.00	
3A 11	MONITOR AIRSPEED INDIC	90.00	
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	90.00	
3R 56	MON PITCH ATTITUDE INDIC ON FDI	90.00	
090037	FLIGHT INSTRUMENT SCAN - E		▽
3A 11	MONITOR AIRSPEED INDIC	90.00	
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	90.00	
3R 56	MON PITCH ATTITUDE INDIC ON FDI	90.00	
3L 03	MON VERTICAL SPEED INDIC	90.00	
090038	CONTROL AIRCRAFT - F (120 SEC PROC)		▽
090039	FLIGHT INSTRUMENT SCAN - F		▽
0A 06	CAPT VIEW THRU NO.1 WINDOW	110.00	
3R 57	MON PITCH ATTITUDE INDIC ON FDI	120.00	
3L 03	MON VERTICAL SPEED INDIC	120.00	
3A 11	MONITOR AIRSPEED INDIC	120.00	
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	120.00	
4A 65 110004	MANUALLY CONTROL A/C PILOT REQUESTS RETURN TO ATLANTA ; CONTROLLER COORDINATES WITH ADJACENT SECTORS FOR RETURN VECTORS.	120.00	▽
1B 20 1P110006	MON VHF-2 COMM AUDIO MON RADIO COMM - [NASA 515, ROGER, STANDBY FOR INSTRUCTIONS]	3.00 3.00	I

1700. 1900. 2100. 2300. 2500. 2700. 2900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
090038	CONTROL AIRCRAFT - F (120 SEC PROC)		▽
090039	FLIGHT INSTRUMENT SCAN - F		▽
3A 11	MONITOR AIRSPEED INDIC	120.00	▬
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	120.00	▬
4A 65	MANUALLY CONTROL A/C	120.00	▬
8A 86	CAPT VIEW THRU NO.1 WINDOW	110.00	▬
3R 57	MON PITCH ATTITUDE INDIC ON FOI	120.00	▬
3L 03	MON VERTICAL SPEED INDIC	120.00	▬
110005	RECEIVE VECTORS FOR THE LANIER SIX STAR, PULASKI TRANSITION		▽
1B 36	MONITOR VHF-2 COMM AUDIO	11.00	0
1P110007	NON RADIO COMM - (NASA 515, FOR VECTOR TO INTERCEPT LANIER SIX ARRIVAL, PULASKI TRANSITION, TURN LGFT HEADING TWO SEVEN ZERO, CONTACT ATLANTA CENTER ON ONE THREE FIVE POINT THREE FIVE, OVER)	3.66	I
1P110008	TURN LGFT HEADING TWO SEVEN ZERO, CONTACT ATLANTA CENTER ON ONE THREE FIVE POINT THREE FIVE, OVER)	4.88	I
1P110009	MON VHF-2 COMM AUDIO BEGIN TURN TO HDG 270	2.44	I
1B 19	MON VHF-2 COMM AUDIO	7.00	0
110006	BEGIN TURN TO HDG 270		▽
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	0
3L 02	MON VERTICAL SPEED INDIC	10.00	0
4A 28	ACT FLT CONTROL TO CHANGE HDG	10.00	0
110007	TUNE BADIO ULTRA HIGH SECTOR -135.35		▽
3S 12	SET HEADING CURSOR ON CI USING HDG CURSOR CONT	4.13	I

1700. 1900. 2100. 2300. 2500. 2700. 2900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
090038	CONTROL AIRCRAFT - F (120 SEC PROC)		▽
090039	FLIGHT INSTRUMENT SCAN - F		▽
3L 03	MON VERTICAL SPEED INDIC	120.00	
3A 11	MONITOR AIRSPEED INDIC	120.00	
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON C1	120.00	
4A 65	MANUALLY CONTROL A/C	120.00	
8A 06	CAPT VIEW THRU NO.1 WINDOW	110.00	
3R 57	MON PITCH ATTITUDE INDIC ON FDI	120.00	
1P110014	MON RADIO COMM - (NASA 515, ROGER, SQUAWK IDENT)	2.50	I
1B 36	MONITOR VHF-2 COMM AUDIO	2.00	I
110008	SET NAV-1 TO PULASKI VOR		▽
1P 12	MON VERBAL REPORT	2.50	I
5G 04	MON VOR POINTER NO.1 ON VOR/RMI 1 INDIC	2.25	I
090038	CONTROL AIRCRAFT - F (120 SEC PROC)		▽
090039	FLIGHT INSTRUMENT SCAN - F		▽
4A 65	MANUALLY CONTROL A/C	120.00	
8A 06	CAPT VIEW THRU NO.1 WINDOW	110.00	
3R 57	MON PITCH ATTITUDE INDIC ON FDI	120.00	
3L 03	MON VERTICAL SPEED INDIC	120.00	
3A 11	MONITOR AIRSPEED INDIC	120.00	
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON C1	120.00	
110009	TURN COMPLETE - ON HOG 270		▽
090002	CONTROL AIRCRAFT - F (10 SEC PROC)		▽

1700. 1900. 2100. 2300. 2500. 2700. 2900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
090003	FLIGHT INSTRUMENT SCAN - A		▽
9L 02	MON VERTICAL SPEED INDIC	10.00	0
3A 10	MONITOR AIRSPEED INDIC	10.00	0
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HOG ON C1	10.00	0
4A 64	MANUALLY CONTROL A/C	10.00	0
8A 05	CAPT VIEW THRU NO.1 WINDOW	10.00	0
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	0
110010	RECEIVE INSTRUCTIONS TO DESCEND TO 31000 FT		▽
090002	CONTROL AIRCRAFT - A (10 SEC PROC)		▽
090003	FLIGHT INSTRUMENT SCAN - A		▽
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HOG ON C1	10.00	0
1B 19	MON VHF-2 COMM AUDIO	7.00	0
1P110016	MON RADIO COMM - (NASA 515, DESCEND AND MAINTAIN FLIGHT LEVEL THREE ONE ZERO)	3.50	1
4A 64	MANUALLY CONTROL A/C	10.00	0
8A 05	CAPT VIEW THRU NO.1 WINDOW	10.00	0
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	0
3L 02	MON VERTICAL SPEED INDIC	10.00	0
3A 10	MONITOR AIRSPEED INDIC	10.00	0
1P110017	CONTACT CENTER ON ONE THREE TWO POINT SEVEN FIVE, OVER]	3.50	1
090008	CONTROL AIRCRAFT - B (5 SEC PROC)		▽
090009	FLIGHT INSTRUMENT SCAN - B		▽
3R 56	MON PITCH ATTITUDE INDIC ON FDI	5.00	1
			1700. 1900. 2100. 2300. 2500. 2700. 2900.

1700. 1900. 2100. 2300. 2500. 2700. 2900.

UNSHIFTED

MISSION TIMELINE
 MISSION - MAIN FLT PHASES
 MANUAL CONTROL
 CONFIGURATION - NASA 515 - FFD
 FLIGHT PHASE - DESCENT - FFD

NOVEM 1978

CREWMEMBER - PILOT

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
140002	BEGIN DESCENT TO 31000FT		
140001	CONTACT PULASKI HIGH SECTOR - 132.75		
140003	ALTITUDE CHANGE PROC		
4A 29	ACT FLT CONTROL TO CHANGE ALT	10.00	
3L 02	MON VERTICAL SPEED	10.00	
3H 02	MON CORR BARO ALT	0.60	
3R 10	MON PITCH ATTITUDE	10.00	
4B 03	INDIC ON FDI ACTUATE BOTH THROTTLES	2.82	
3F 01	MON MACH NO INDIC	2.37	
090038	CONTROL AIRCRAFT - F (120 SEC PROC)		
090039	FLIGHT INSTRUMENT SCAN - F		
3L 03	MON VERTICAL SPEED	120.00	
3A 11	INDIC MONITOR AIRSPEED	120.00	
3S 15	INDIC MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	120.00	
4A 65	MANUALLY CONTROL A/C	120.00	
8A 06	CAPT VIEW THRU NO.1 WINDOW	110.00	
3R 57	MON PITCH ATTITUDE	120.00	
1P140003	INDIC ON FDI NON RADIO COMM - [NASA 515, ATLANTA CENTER, ROGER. SQUAWK IDENT]	3.00	
1B 20	MON VHF-2 COMM AUDIO	3.00	

2600.

3100.

3600.

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4600.

5100.

5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P140004	MON RADIO COMM - [NASA 515. RADAR CONTACT]	2.00	I
1B 96	MONITOR VHF-2 COMM AUDIO	2.00	I
090000	CONTROL AIRCRAFT - B (5 SEC PROC)		▽
090009	FLIGHT INSTRUMENT SCAN - B		▽
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	5.00	I
4A 64	MANUALLY CONTROL A/C	5.00	I
8A 05	CAPT VIEW THRU NO. 1 WINDOW	5.00	I
3R 56	MON PITCH ATTITUDE INDIC ON FDI	5.00	I
3L 02	MON VERTICAL SPEED INDIC	5.00	I
3A 10	MONITOR AIRSPEED INDIC	5.00	I
140004	LEVEL OFF AT 31000 FT		▽
140003	ALTITUDE CHANGE PROC		▽
3L 02	MON VERTICAL SPEED INDIC	10.00	I
3H 02	MON CORR BARO ALT INDIC	0.60	I
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
4B 03	ACTUATE BOTH THROTTLES	2.02	I
3F 01	MON MACH NO INDIC	2.37	I
4A 29	ACT FLT CONTROL TO CHANGE ALT	10.00	I
090018	CONTROL AIRCRAFT - D (60 SEC PROC)		▽
090019	FLIGHT INSTRUMENT SCAN - D		▽
3L 02	MON VERTICAL SPEED INDIC	60.00	□
3A 10	MONITOR AIRSPEED INDIC	60.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	60.00	□
4A 65	MANUALLY CONTROL A/C	60.00	□

2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
8A 05	CAPT VIEW THRU NO.1 WINDOW	60.00	□
3R 56	MON PITCH ATTITUDE INDIC ON FDI	60.00	□
140005	RECEIVE VECTOR TO INTERCEPT PULASKI 225 RADIAL		▽
1P140005	MON RADIO COMM - THASA 515, FOR VEC- TOR TO INTERCEPT	3.27	I
1B 36	PULASKI TWO TWO FIVE MONITOR VHF-2 COMM AUDIO	12.00	I
1P140006	RADIAL, TURN LEFT HEADING TWO FOUR ZERO, CLEARED TO THE	4.36	I
1P140007	ATLANTA INTERNA- TIONAL AIRPORT VIA THE LANIER SIX AR- RIVAL, PULASKI TRAN- SITION, OVER]	4.36	I
140006	TURN TO HDG 240		▽
140007	HEADING CHANGE PROC.		▽
3L 02	MON VERTICAL SPEED INDIC	10.00	I
3S 11	SET COURSE DIGITS AND POINTER ON CI USING COURSE CURSOR CONT	4.92	I
3R 58	MON A/C ATTITUDE RELATIVE TO ROLL COMMAND ON FDI	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	I
4A 28	ACT FLT CONTROL TO CHANGE HDG	10.00	I
090002	CONTROL AIRCRAFT - A (10 SEC PROC)		▽
090003	FLIGHT INSTRUMENT SCAN - A		▽
SR 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
3L 02	MON VERTICAL SPEED INDIC	10.00	I

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CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
3A 10	MONITOR AIRSPEED INDIC	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON C1	10.00	I
4A 64	MANUALLY CONTROL A/C	10.00	I
0A 05	CAPT VIEW THRU NO.1 WINDOW	10.00	I
090038	CONTROL AIRCRAFT - F (120 SEC PROC)		▽
090039	FLIGHT INSTRUMENT SCAN - F		▽
3A 11	MONITOR AIRSPEED INDIC	120.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON C1	120.00	□
4A 65	MANUALLY CONTROL A/C	120.00	□
0A 06	CAPT VIEW THRU NO.1 WINDOW	110.00	□
3R 57	MON PITCH ATTITUDE INDIC ON FDI	120.00	□
3L 03	MON VERTICAL SPEED INDIC	120.00	□
140008	TURN COMPLETE - ON HDG 240		▽
140009	BEGIN TURN TO PULASKI 225 RADIAL		▽
140007	HEADING CHANGE PROC.		▽
3R 58	MON A/C ATTITUDE RELATIVE TO ROLL COMMAND ON FDI	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON C1	10.00	I
4A 20	ACT FLT CONTROL TO CHANGE HDG	10.00	I
3L 02	MON VERTICAL SPEED INDIC	10.00	I
3S 11	SET COURSE DIGITS AND POINTER ON C1 USING COURSE CURSOR CONT	4.92	I
090036	CONTROL AIRCRAFT - E (0 SEC PROC)		▽

2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
090037	FLIGHT INSTRUMENT SCAN - E		▽
3L 03	MON VERTICAL SPEED INDIC	90.00	□
3A 11	MONITOR AIRSPEED INDIC	90.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	90.00	□
4A 65	MANUALLY CONTROL A/C	300.00	▬
8A 06	CAPT VIEW THRU NO.1 WINDOW	300.00	▬
3R 56	MON PITCH ATTITUDE INDIC ON FDI	90.00	□
140010	TURN COMPLETE - ON HOG 225		▽
140011	SET NAV-2 TO TOCCOA VOR -109.8		▽
5G 05	MON VOR POINTER NO.2 ON VOR/RMI 1 INDIC	2.25	I
090037	FLIGHT INSTRUMENT SCAN - E		▽
3L 03	MON VERTICAL SPEED INDIC	90.00	□
3A 11	MONITOR AIRSPEED INDIC	90.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	90.00	□
3R 56	MON PITCH ATTITUDE INDIC ON FDI	90.00	□
140012	HANDOFF TO LANIER HIGH SECTOR		▽
1B 18	MON VHF-2 COMM AUDIO	3.50	I
1P140010	MON RADIO COMM - [NASA 515, CONTACT CENTER ON ONE THREE TWO POINT EIGHT, OVER	3.50	I
1P140013	MON RADIO COMM - [NASA 515, ATLANTA CENTER, ROGER, SQUAWK IDENT]	3.00	I
1B 20	MON VHF-2 COMM AUDIO	3.00	I
1P140014	MON RADIO COMM- [NASA 515, RADAR CONTACT]	2.00	I

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CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1B 36	MONITOR VHF-2 COMM AUDIO	2.00	I
090039	FLIGHT INSTRUMENT SCAN - F		▽
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON C1	120.00	□
3R 57	MON PITCH ATTITUDE INDIC ON FDI	120.00	□
9L 03	MON VERTICAL SPEED INDIC	120.00	□
9A 11	MONITOR AIRSPEED INDIC	120.00	□
090002	CONTROL AIRCRAFT - A (10 SEC PROC)		▽
090003	FLIGHT INSTRUMENT SCAN - A		▽
140013	RECEIVE INSTRUCTIONS TO DESCEND TO 24000 FT		▽
9A 10	MONITOR AIRSPEED INDIC	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON C1	10.00	I
1B 36	MONITOR VHF-2 COMM AUDIO	6.50	I
1P140015	MON RADIO COMM - [NASA 515, DESCEND AND MAINTAIN FLIGHT LEVEL TWO FOUR ZERO.]	3.90	I
4A 64	MANUALLY CONTROL A/C	10.00	I
8A 05	CAPT VIEW THRU NO.1 WINDOW	10.00	I
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
3L 02	MON VERTICAL SPEED INDIC	10.00	I
1P140016	REPORT LEAVING FLT LEVEL TWO SIX ZERO, OVER]	2.60	I
140014	BEGIN MACH 0.75 DESCENT		▽
140003	ALTITUDE CHANGE PROC		▽
3L 02	MON VERTICAL SPEED INDIC	10.00	I

2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
3H 02	MON CORR BARO ALT INDIC	0.00	I
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
4B 03	ACTUATE BOTH THROTTLES	2.02	I
3F 01	MON MACH NO INDIC	2.37	I
4A 29	ACT FLT CONTROL TO CHANGE ALT	10.00	I
090036	CONTROL AIRCRAFT - E (0 SEC PROC)		▽
090037	FLIGHT INSTRUMENT SCAN - E		▽
3L 03	MON VERTICAL SPEED INDIC	90.00	□
3A 11	MONITOR AIRSPEED INDIC	90.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	90.00	□
4A 65	MANUALLY CONTROL A/C	300.00	▬
8A 06	CAPT VIEW THRU NO.1 WINDOW	300.00	▬
3R 56	MON PITCH ATTITUDE INDIC ON FDI	90.00	□
090037	FLIGHT INSTRUMENT SCAN - E		▽
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	90.00	□
3R 56	MON PITCH ATTITUDE INDIC ON FDI	90.00	□
3L 03	MON VERTICAL SPEED INDIC	90.00	□
3A 11	MONITOR AIRSPEED INDIC	90.00	□
090039	FLIGHT INSTRUMENT SCAN - F		▽
3R 57	MON PITCH ATTITUDE INDIC ON FDI	120.00	□
3L 03	MON VERTICAL SPEED INDIC	120.00	□
3A 11	MONITOR AIRSPEED INDIC	120.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	120.00	□
			2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
090018	CONTROL AIRCRAFT - D (60 SEC PROC)		▽
090019	FLIGHT INSTRUMENT SCAN - D		▽
0A 05	CAPT VIEW THRU NO.1 WINDOW	60.00	□
3R 56	MON PITCH ATTITUDE INDIC ON FDI	60.00	□
3L 02	MON VERTICAL SPEED INDIC	60.00	□
3A 10	MONITOR AIRSPEED INDIC	60.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	60.00	□
4A 65	MANUALLY CONTROL A/C	60.00	□
090016	CONTROL AIRCRAFT - C (5 SEC PROC)		▽
090017	FLIGHT INSTRUMENT SCAN - C		▽
3L 02	MON VERTICAL SPEED INDIC	30.00	□
3A 10	MONITOR AIRSPEED INDIC	30.00	□
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	30.00	□
4A 64	MANUALLY CONTROL A/C	30.00	□
0A 05	CAPT VIEW THRU NO.1 WINDOW	30.00	□
3R 56	MON PITCH ATTITUDE INDIC ON FDI	30.00	□
090008	CONTROL AIRCRAFT - B (5 SEC PROC)		▽
090009	FLIGHT INSTRUMENT SCAN - B		▽
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	5.00	I
4A 64	MANUALLY CONTROL A/C	5.00	I
0A 05	CAPT VIEW THRU NO.1 WINDOW	5.00	I
3R 56	MON PITCH ATTITUDE INDIC ON FDI	5.00	I
3L 02	MON VERTICAL SPEED INDIC	5.00	I

2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
3A 10	MONITOR AIRSPEED INDIC	5.00	I
140015	REACH 26000 FT		▽
090036	CONTROL AIRCRAFT - E (0 SEC PROC)		▽
090037	FLIGHT INSTRUMENT SCAN - E		▽
140016	RECEIVE CLEARANCE TO DESCEND TO 11000 FT.		▽
0A 06	CAPT VIEW THRU NO.1 WINDOW	300.00	▬
3R 56	MON PITCH ATTITUDE INDIC ON FDI	90.00	□
3L 03	MON VERTICAL SPEED INDIC	90.00	□
3A 11	MONITOR AIRSPEED INDIC	90.00	□
9S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	90.00	□
4A 65	MANUALLY CONTROL A/C	300.00	▬
1P140020	MON RADIO COMM - [NASA 515, DESCEND AND MAINTAIN ONE ONE THOUSAND, CONTACT	3.75	I
1B 19	MON VHF-2 COMM AUDIO	6.20	I
1P140021	CENTER ON ONE TWO FIVE POINT TWO, OVER]	2.50	I
140017	TUNE NORCROSS LOW SECTOR -125.2		▽
1B 18	MON VHF-2 COMM AUDIO	6.00	I
1P140026	MON RADIO COMM - [NASA 515, ATLANTA CENTER, ROGER, SQUAWK IDENT, ALTI-	3.50	I
1P140027	METER TWO NINE POINT EIGHT EIGHT]	2.50	I
140018	SET ALTIMETER BARO SETTING TO 29.80		▽
1P 13	MON VERBAL REPORT	2.40	I
140032	ALTIMETER BARO SET PROC.		▽
3H 03	SET ALTIMETER BARO SETTING CONTRL	2.65	I
3H 04	MONITOR ALTIMETER BARO SETTING INDIC	2.65	I

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CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
090037	FLIGHT INSTRUMENT SCAN - E		▽
3A 11	MONITOR AIRSPEED INDIC	90.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON C1	90.00	□
3R 56	MON PITCH ATTITUDE INDIC ON FDI	90.00	□
3L 03	MON VERTICAL SPEED INDIC	90.00	□
090039	FLIGHT INSTRUMENT SCAN - F		▽
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON C1	120.00	□
3R 57	MON PITCH ATTITUDE INDIC ON FDI	120.00	□
3L 03	MON VERTICAL SPEED INDIC	120.00	□
3A 11	MONITOR AIRSPEED INDIC	120.00	□
140019	CROSS TOCCOR VOR		▽
140020	TUNE NORCROSS VOR -116.6		▽
090018	CONTROL AIRCRAFT - D (60 SEC PROC)		▽
090019	FLIGHT INSTRUMENT SCAN - D		▽
4A 65	MANUALLY CONTROL A/C	60.00	□
8A 05	CAPT VIEW THRU NO.1 WINDOW	60.00	□
3R 56	MON PITCH ATTITUDE INDIC ON FDI	60.00	□
3L 02	MON VERTICAL SPEED INDIC	60.00	□
3A 10	MONITOR AIRSPEED INDIC	60.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON C1	60.00	□
140022	REACH 17000 FT. BEGIN 500 FT/MIN RATE OF DESCENT		▽
140023	REPORT 1000 FT TO LEVEL OFF		▽
1P 11	MON VERBAL REPORT	1.70	I

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CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P 13	MON VERBAL REPORT	2.30	I
5G 04	MON VOR POINTER NO.1	2.25	I
140021	ON VOR/RMI 1 INDIC RECEIVE INSTRUCTIONS TO GO INTO A HOLDING PATTERN AT LANIER INTERSECTION		▽
1B 37	MONITOR VHF-2 COMM	16.00	0
1P140028	MON RADIO COMM - [NASA 515, MAINTAIN ONE FIVE THOUSAND, CLEARANCE LIMIT IS	4.00	I
1P140029	MON LANIER INTERSEC- TION, HOLD NORTHWEST OF FIX ON NORCROSS	5.33	I
1P140030	ZERO FOUR ONE RADIAL ONE AND ONE-HALF MINUTE RIGHT TURNS. EXPECT FURTHER CLEARANCE AT ONE	5.33	I
1P140031	SEVEN ONE FIVE, OVER]	1.33	I
140024	REACH 16000 FT, BE- GIN DECELERATION TO 210 KIAS.		▽
140003	ALTITUDE CHANGE PROC		▽
3F 01	MON MACH NO INDIC	2.37	I
4A 29	ACT FLT CONTROL TO CHANGE ALT	10.00	I
3L 02	MON VERTICAL SPEED INDIC	10.00	I
5H 02	MON CORR BARO ALT INDIC	0.60	I
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
4B 03	ACTUATE BOTH THROTTLES	2.82	I
110012	FLT INST SCAN - 1		▽
3L 04	MON IVSI INDIC	205.00	▬
3S 17	MON A/C HEADING RELATIVE TO SELECTED COURSE ON CI	205.00	▬
3R 57	MON PITCH ATTITUDE INDIC ON FDI	205.00	▬
140025	TUNE CHATTANOOGA VOR -115.0		▽
3A 14	MON AIRSPEED INDIC	205.00	▬
1P 13	MON VERBAL REPORT	2.30	I

2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
5G 05	MON VOR POINTER NO.2	2.25	I
140026	ON VOR/RMI 1 INDIC		▽
4B 03	REACH 210 KIAS.	2.82	I
3A 01	ACTUATE BOTH THROTTLES	2.37	I
140027	MONITOR INDICATED AIRSPEED INDIC		▽
	HOLDING PATTERN PROC		
	-RIGHT TURNS		
	-1 1/2 MIN. LEGS		
	-1 LOOP		
	-INITIATE FIRST TURN OVER INTER-SECTION		
3A 11	MONITOR AIRSPEED INDIC	90.00	□
3S 20	MON INDIC OF MARKER	2.23	I
3S 12	FLY OVER ON CI	5.00	I
	SET HEADING CURSOR ON CI USING HOG CURSOR CONT		
4A 66	MANUALLY CONTROL A/C TO MAKE RIGHT TURN IN HOLDING PATTERN	90.00	□
3L 03	MON VERTICAL SPEED INDIC	90.00	□
3N 03	START ELAPSED TIME INDIC	2.10	I
4B 07	MAKE MINOR THRUST ADJUSTMENT	2.73	I
3S 17	MON A/C HEADING RELATIVE TO SELECTED COURSE ON CI	90.00	□
4A 65	MANUALLY CONTROL A/C	90.00	□
3N 04	RESET ELAPSED TIME INDIC	2.10	I
3A 11	MONITOR AIRSPEED INDIC	90.00	□
3L 03	MON VERTICAL SPEED INDIC	90.00	□
3S 17	MON A/C HEADING RELATIVE TO SELECTED COURSE ON CI	90.00	□
4A 67	ROLL OUT TO LEVEL CONFIGURATION	0.00	I

2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
9S 16	MON INDIC THAT A/C ABEAM OF MARKER AND ON HEADING	2.23	I
4B 07	MAKE MINOR THRUST ADJUSTMENT	2.73	I
1P 11	MON VERBAL REPORT	0.00	I
1P 11	MON VERBAL REPORT	0.00	I
1P 11	MON VERBAL REPORT	0.00	I
3N 03	START ELAPSED TIME INDIC	2.10	I
3L 03	MON VERTICAL SPEED INDIC	90.00	□
3A 11	MONITOR AIRSPEED INDIC	90.00	□
4A 66	MANUALLY CONTROL A/C TO MAKE RIGHT TURN IN HOLDING PATTERN	90.00	□
4B 07	MAKE MINOR THRUST ADJUSTMENT	2.73	I
3S 17	MON A/C HEADING RELATIVE TO SELECTED COURSE ON CI	90.00	□
3L 03	MON VERTICAL SPEED INDIC	60.00	□
4A 67	ROLL OUT TO LEVEL CONFIGURATION	0.00	I
3N 04	RESET ELAPSED TIME INDIC	2.10	I
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	90.00	□
4A 65	MANUALLY CONTROL A/C	60.00	□
3A 10	MONITOR AIRSPEED INDIC	30.00	□
4B 07	MAKE MINOR THRUST ADJUSTMENT	2.73	I
1P 11	MON VERBAL REPORT	0.00	I
140020	RECEIVE CLEARANCE TO CONTINUE DESCENT AND APPROACH		I
1P140034	MON RADIO COMM - CNASA 515, CLEARED TO ATLANTA INTERNATIONAL AIRPORT VIA	9.27	I
10 36	MONITOR VHF-2 COMM AUDIO	12.00	I

2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P140035	LAST ROUTING CLEARED . INCREASE SPEED TO TWO THREE ZERO KNOTS	4.36	I
1P140036	. DESCEND AND MAINTAIN ONE ONE THOUSAND. EXPECT AN ILS RUNWAY ZERO EIGHT APPROACH, OVER]	4.36	I
3N 03	START ELAPSED TIME INDIC	2.10	I
140029	BEGIN DESCENT. SET THRUST FLIGHT IDLE		▽
140003	ALTITUDE CHANGE PROC		▽
4A 29	ACT FLT CONTROL TO CHANGE ALT	10.00	I
3L 02	MON VERTICAL SPEED INDIC	10.00	I
3H 02	MON CORR BARO ALT INDIC	0.60	I
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
4B 03	ACTUATE BOTH THROTTLERS	2.82	I
3F 01	MON MACH NO INDIC	2.37	I
090038	CONTROL AIRCRAFT - F (120 SEC PROC)		▽
090039	FLIGHT INSTRUMENT SCAN - F		▽
3R 57	MON PITCH ATTITUDE INDIC ON FDI	120.00	□
3L 03	MON VERTICAL SPEED INDIC	120.00	□
3A 11	MONITOR AIRSPEED INDIC	120.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	120.00	□
4A 65	MANUALLY CONTROL A/C	120.00	□
8A 06	CAPT VIEW THRU NO. 1 WINDOW	110.00	□
090038	CONTROL AIRCRAFT - F (120 SEC PROC)		▽
090039	FLIGHT INSTRUMENT SCAN - F		▽
3A 11	MONITOR AIRSPEED INDIC	120.00	□

2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE		EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS	
SS	15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON C1	120.00		□
4A	65	MANUALLY CONTROL A/C	120.00		□
BA	06	CAPT VIEW THRU NO.1 WINDOW	110.00		□
3R	57	MON PITCH ATTITUDE INDIC ON FDI	120.00		□
3L	03	MON VERTICAL SPEED INDIC	120.00		□
	140023	REPORT 1000 FT TO LEVEL OFF			▽
1P	11	MON VERBAL REPORT	1.70		▽
	090016	CONTROL AIRCRAFT - C (SEC PROC)			▽
	090017	FLIGHT INSTRUMENT SCAN - C			▽
BA	05	CAPT VIEW THRU NO.1 WINDOW	30.00		□
3R	56	MON PITCH ATTITUDE INDIC ON FDI	30.00		□
3L	02	MON VERTICAL SPEED INDIC	30.00		□
3A	10	MONITOR AIRSPEED INDIC	30.00		□
3S	01	MONITOR A/C HEADING RELATIVE TO SELECTED HOG ON C1	30.00		□
4A	64	MANUALLY CONTROL A/C	30.00		□
	090002	CONTROL AIRCRAFT - A (10 SEC PROC)			▽
	090003	FLIGHT INSTRUMENT SCAN - A			▽
3L	02	MON VERTICAL SPEED INDIC	10.00		I
3A	10	MONITOR AIRSPEED INDIC	10.00		I
3S	01	MONITOR A/C HEADING RELATIVE TO SELECTED HOG ON C1	10.00		I
4A	64	MANUALLY CONTROL A/C	10.00		I
BA	05	CAPT VIEW THRU NO.1 WINDOW	10.00		I
3R	10	MON PITCH ATTITUDE INDIC ON FDI	10.00		I
	140030	REACH 11000 FT AT 230 KIAS			▽
				2600.	3100.
				3600.	4100.
				4600.	5100.
				5600.	

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
140003	ALTITUDE CHANGE PROC		▽
3F 01	MON MACH NO INDIC	2.37	I
4A 29	ACT FLT CONTROL TO CHANGE ALT	10.00	I
3L 02	MON VERTICAL SPEED INDIC	10.00	I
3H 02	MON CORR BARO ALT INDIC	0.60	I
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
4B 03	ACTUATE BOTH THROTTLES	2.82	I
090002	CONTROL AIRCRAFT - A (10 SEC PROC)		▽
090003	FLIGHT INSTRUMENT SCAN - A		▽
8A 05	CAPT VIEW THRU NO.1 WINDOW	10.00	I
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
3L 02	MON VERTICAL SPEED INDIC	10.00	I
3A 10	MONITOR AIRSPEED INDIC	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	I
4A 64	MANUALLY CONTROL A/C	10.00	I
140031	HANDOFF TO ATLANTA APPROACH CONTROL		▽
090002	CONTROL AIRCRAFT - A (10 SEC PROC)		▽
090003	FLIGHT INSTRUMENT SCAN - A		▽
1P140039	MON RADIO COMM - [NASA 515, CONTACT APPROACH CONTROL ON ONE TWO SIX POINT	4.00	I
4A 64	MANUALLY CONTROL A/C	10.00	I
8A 05	CAPT VIEW THRU NO.1 WINDOW	10.00	I
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
3L 02	MON VERTICAL SPEED INDIC	10.00	I
3A 10	MONITOR AIRSPEED INDIC	10.00	I
			2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HOG ON C1	10.00	I
1B 20	MON VHF-2 COMM AUDIO	5.00	I
1P140040	NINER, OVERJ	1.00	I
		2600.	3100. 3600. 4100. 4600. 5100. 5600.

UNSHIFTED

MISSION TIMELINE
 MISSION - MSN11N FLT PHASES
 MANUAL CONTROL
 CONFIGURATION - NASA 515 - FFD
 FLIGHT PHASE - APP AND LAND - FFD
 ILS PROCEDURAL
 CREWMEMBER - PILOT

NOVEM 1978

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
160051	CONTROL AIRCRAFT - D (60 SEC PROC)		
090019	FLIGHT INSTRUMENT SCAN - D		
4A 65	MANUALLY CONTROL A/C	60.00	
3R 64	MON COMMAND BAR	60.00	
	ATTITUDE INDIC ON FDI		
3R 56	MON PITCH ATTITUDE INDIC ON FDI	60.00	
3L 02	MON VERTICAL SPEED INDIC	60.00	
3A 10	MONITOR AIRSPEED INDIC	60.00	
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	60.00	
160002	TUNE ATIS -123.7		
1P160001	MON RADIO COMM - [INFORMATION LIMA ONE SEVEN ZERO FIVE OBSERVATION- TWO	3.42	I
1A 15	MON VHF-1 COMM AUDIO	24.00	O
1P160002	FIVE HUNDRED SCAT- TERED CEILING FOUR THOUSAND BROKEN. VISIBILITY ONE SIX.	4.56	I
1P160003	TEMPERATURE FIVE NINER. WIND ONE ONE ZERO DEGREES AT TEN GUSTING TO ONE SEVEN	4.56	I
1P160004	. ALTIMETER TWO - NINER EIGHT FOUR. SIMULTANEOUS PARAL- LEL APPROACHES IN	4.56	I

4900. 5400. 5900. 6400. 6900. 7400. 7900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P160005	OPERATION ON RUNWAYS ZERO EIGHT AND NINE RIGHT. ADVISE CON- TROLLER ON INITIAL CONTACT YOU HAVE IN- FORMATION LIMA.]	4.56	I
1P160006	SET ALTIMETER BARO SETTING TO 29.84	2.20	I
160003	MON VERBAL REPORT ALTIMETER BARO SET PROC.	3.50	I
1P 13	MONITOR ALTIMETER BARO SETTING INDIC	2.65	I
140032	SET ALTIMETER BARO SETTING CONTROL	2.65	I
3H 04	CONTACT ATLANTA AP- PROACH CONTROL		▽
3H 03	DESCENT AND APPROACH CHECKLIST - 1		▽
160004	CALL OUT-(DESCENT AND APPROACH CHECK- LIST)	2.00	I
160005	CONTROL AIRCRAFT - D (60 SEC PROC)		▽
1P160043	FLIGHT INSTRUMENT SCAN - D		▽
160091	MON COMMAND BAR ATTITUDE INDIC ON FDI	60.00	□
090019	MON PITCH ATTITUDE INDIC ON FDI	60.00	□
3R 64	MON VERTICAL SPEED INDIC	60.00	□
3R 56	MONITOR AIRSPEED INDIC	60.00	□
3L 02	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	60.00	□
9A 10	MANUALLY CONTROL A/C	60.00	□
3S 15	MON VHF-1 COMM AUDIO	2.50	I
4A 65	MON RADIO COMM - [NASA 515, ROGER. SQUAWK IDENT.]	2.50	I
1A 15	MON VERBAL REPORT	1.00	I
1P160009	MON VERBAL REPORT	0.00	I
1P 10	MON VERBAL REPORT	1.00	I
1P 07	MON VERBAL REPORT	0.00	I
1P 13	MON VERBAL REPORT	1.00	I
1P 16	MON VERBAL REPORT	0.40	I

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CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
160006	DESCENT AND APPROACH CHECKLIST - 2		▽
1P 11	MON VERBAL REPORT	0.90	I
7M 03	SET ENG NO.1 START	3.54	I
	SW TO FLT		
7M 06	SET ENG NO.2 START	1.74	I
	SW TO FLT		
1P160049	CALL OUT [FLIGHT]	0.50	I
1P 12	MON VERBAL REPORT	1.10	I
1P 16	MON VERBAL REPORT	0.30	I
1P 12	MON VERBAL REPORT	1.40	I
1P 09	MON VERBAL REPORT	1.30	I
160007	DESCENT AND APPROACH CHECKLIST - 3		▽
1P 02	MON VERBAL REPORT	1.50	I
160009	CONTROL AIRCRAFT - B (10 SEC PROC)		▽
090003	FLIGHT INSTRUMENT SCAN - A		▽
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	I
4A 64	MANUALLY CONTROL A/C	10.00	I
3R 64	MON COMMAND BAR ATTITUDE INDIC ON FDI	10.00	I
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
3L 02	MON VERTICAL SPEED INDIC	10.00	I
3A 10	MONITOR AIRSPEED INDIC	10.00	I
1P 14	MON VERBAL REPORT	1.90	I
160009	CONTROL AIRCRAFT - B (10 SEC PROC)		▽
3R 64	MON COMMAND BAR ATTITUDE INDIC ON FDI	10.00	I
4A 64	MANUALLY CONTROL A/C	10.00	I
3A 07	MON V-REF BUG SETTING	2.57	I
3A 05	SET V-REF BUG	2.57	I
3A 13	CAPT CHECK F.O.<S V-REF BUG SETTING	3.00	I
1P 08	MON VERBAL REPORT	1.60	I
160009	CONTROL AIRCRAFT - B (10 SEC PROC)		▽

4900. 5400. 5900. 6400. 6900. 7400. 7900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
160000	CROSS NORCROSS VOR. RECEIVE INSTRUCTIONS TO TURN TO HDG 210 AND TO SLOW TO 200 KIAS		▽
1B 10	MON VHF-2 COMM AUDIO	6.00	I
1P160010	MON RADIO COMM - CNASA 515, TURN LEFT HEADING TWO ONE ZERO REDUCE SPEED TO TWO	4.00	I
4A 64	MANUALLY CONTROL A/C	10.00	I
9R 64	MON COMMAND BAR ATTITUDE INDIC ON FDI	10.00	I
1P 02	MON VERBAL REPORT	1.30	I
1P160011	ZERO ZERO, OVERJ	2.00	I
090009	FLIGHT INSTRUMENT SCAN - B		▽
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON C1	5.00	I
3R 56	MON PITCH ATTITUDE INDIC ON FDI	5.00	I
3L 02	MON VERTICAL SPEED INDIC	5.00	I
3A 10	MONITOR AIRSPEED INDIC	5.00	I
160009	TURN TO HDG 210 AND SLOW TO 200 KIAS		▽
140007	HEADING CHANGE PROC.		▽
3L 02	MON VERTICAL SPEED INDIC	10.00	I
3S 11	SET COURSE DIGITS AND POINTER ON C1 USING COURSE CURSOR CONT	4.92	I
3R 50	MON A/C ATTITUDE RELATIVE TO ROLL COMMAND ON FDI	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON C1	10.00	I
4A 20	ACT FLT CONTROL TO CHANGE HDG	10.00	I
160010	TURN COMPLETE - ON HDG 210		▽

4900. 5400. 5900. 6400. 6900. 7400. 7900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
160008	CONTROL AIRCRAFT - A (5 SEC PROC)		▽
090009	FLIGHT INSTRUMENT SCAN - B		▽
160011	SET FLAPS TO FLAPS 1		▽
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	5.00	I
1P160058	CALL OUT -[FLAPS 1]	0.70	I
4A 64	MANUALLY CONTROL A/C	5.00	I
3R 64	MON COMMAND BAR ATTITUDE INDIC ON FDI	5.00	I
3R 56	MON PITCH ATTITUDE INDIC ON FDI	5.00	I
3L 02	MON VERTICAL SPEED INDIC	5.00	I
3A 10	MONITOR AIRSPEED INDIC	5.00	I
160008	CONTROL AIRCRAFT - A (5 SEC PROC)		▽
090009	FLIGHT INSTRUMENT SCAN - B		▽
160012	REACH 200 KIAS		▽
4B 07	MAKE MINOR THRUST ADJUSTMENT	2.73	I
1P 10	MON VERBAL REPORT	0.70	I
4A 64	MANUALLY CONTROL A/C	5.00	I
3R 64	MON COMMAND BAR ATTITUDE INDIC ON FDI	5.00	I
3R 56	MON PITCH ATTITUDE INDIC ON FDI	5.00	I
3L 02	MON VERTICAL SPEED INDIC	5.00	I
3A 10	MONITOR AIRSPEED INDIC	5.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	5.00	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
160093	CONTROL AIRCRAFT - F (120 SEC PROC)		▽
090039	FLIGHT INSTRUMENT SCAN - F		▽

4900. 5400. 5900. 6400. 6900. 7400. 7900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
160013	SET NAV-1 TO RUNWAY 08 ILS -109.9		▽
9R 57	MON PITCH ATTITUDE	120.00	□
3L 03	INDIC ON FDI		
3L 03	MON VERTICAL SPEED	120.00	□
9A 11	INDIC		
9A 11	MONITOR AIRSPEED	120.00	□
3S 15	INDIC		
3S 15	MONITOR A/C HEADING	120.00	□
	RELATIVE TO SELECTED		
	HEADING ON C1		
4A 65	MANUALLY CONTROL A/C	120.00	□
9R 65	MON COMMAND BAR	120.00	□
	ATTITUDE INDIC ON		
	FDI		
1P 12	MON VERBAL REPORT	2.50	I
5G 04	MON VOR POINTER NO.1	2.25	I
	ON VOR/RMI 1 INDIC		
160014	SET NAV-2 TO REG VOR -111.8		▽
1P 02	MON VERBAL REPORT	2.00	I
5G 05	MON VOR POINTER NO.2	2.25	I
	ON VOR/RMI 1 INDIC		
160015	RECEIVE INSTRUCTIONS		▽
	TO SLOW TO 190 KIAS		
1B 37	MONITOR VHF-2 COMM	4.00	I
1P160014	MON RADIO COMM -	4.00	I
	[NASA 515, REDUCE		
	SPEED TO ONE NINER		
	ZERO KNOTS, OVER]		
160016	REDUCE SPEED		▽
4B 07	MAKE MINOR THRUST	2.73	I
	ADJUSTMENT		
160017	SET FLAPS TO FLAPS 5		▽
160018	FLAP SET PROCEDURE		▽
1P160061	CALL OUT -[FLAPS 5]	0.70	I
1P 10	MON VERBAL REPORT	0.70	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
160091	CONTROL AIRCRAFT - 0		▽
	(40 SEC PROC)		
090019	FLIGHT INSTRUMENT		▽
	SCAN - 0		
3A 10	MONITOR AIRSPEED	60.00	□
	INDIC		

4900. 5400. 5900. 6400. 6900. 7400. 7900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON C1	60.00	□
4A 65	MANUALLY CONTROL A/C	60.00	□
3R 64	MON COMMAND BAR	60.00	□
3R 56	ATTITUDE INDIC ON FDI	60.00	□
3L 02	MON PITCH ATTITUDE INDIC ON FDI	60.00	□
160019	MON VERTICAL SPEED INDIC	60.00	□
1B 20	HANDOFF TO APPROACH CONTROL -127.25	5.00	▽
1P160016	MON VHF-2 COMM AUDIO	4.00	I
1P160017	MON RADIO COMM - [NASA 515, CONTACT APPROACH CONTROL ON ONE TWO SEVEN POINT TWO FIVE, OVER]	1.00	I
1P160021	MON RADIO COMM - [NASA 515, ATLANTA APPROACH, ROGER, SQUAWK IDENT]	3.50	I
1B 19	MON VHF-2 COMM AUDIO	10.00	I
160020	RECEIVE INSTRUCTIONS TO TURN TO HDG 270, REDUCE SPEED TO 170, AND TO DESCEND TO 4500 FT.	10.00	▽
1P160022	MON RADIO COMM - [NASA 515, TURN RT HEADING TWO SEVEN ZERO, REDUCE SPEED	3.00	I
1B 19	MON VHF-2 COMM AUDIO	7.00	I
1P160023	TO ONE SEVEN ZERO KNOTS, DESCEND AND MAINTAIN FOUR FIVE HUNDRED, OVER]	4.00	I
160021	BEGIN TURN TO HDG 270		▽
140007	HEADING CHANGE PROC.		▽
090003	FLIGHT INSTRUMENT SCAN - A		▽
3S 11	SET COURSE DIGITS AND POINTER ON C1 USING COURSE CURSOR CONT	4.92	I

4900. 5400. 5900. 6400. 6900. 7400. 7900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
9R 58	MON A/C ATTITUDE RELATIVE TO ROLL COMMAND ON FDI	10.00	I
9R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
9L 02	MON VERTICAL SPEED INDIC	10.00	I
9A 10	MONITOR AIRSPEED INDIC	10.00	I
9S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	I
4A 20	ACT FLT CONTROL TO CHANGE HDG	10.00	I
9L 02	MON VERTICAL SPEED INDIC	10.00	I
160090	CONTROL AIRCRAFT - C (30 SEC PROC)		▽
3R 64	MON COMMAND BAR ATTITUDE INDIC ON FDI	30.00	0
4A 64 160022	MANUALLY CONTROL A/C TURN COMPLETE - ON HDG 270. BEGIN DECELERATION TO 170. MAKE MINOR THRUST ADJUSTMENT	30.00	0 ▽
4B 07 160023	REACH 170 KIAS	2.73	I ▽
160024	BEGIN DESCENT TO 4500 FT.		▽
140003	ALTITUDE CHANGE PROC		▽
160010	FLAP SET PROCEDURE		▽
160025	SET FLAPS TO FLAPS 15		▽
9L 02	MON VERTICAL SPEED INDIC	10.00	I
3H 02	MON CORR BARO ALT INDIC	0.60	I
9R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
4B 03	ACTUATE BOTH THROTTLES	2.82	I
3F 01	MON MACH NO INDIC	2.37	I

4980. 5480. 5980. 6480. 6980. 7480. 7980.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P160062	CALL OUT - [FLAPS 15]	0.70	I
4A 29	ACT FLT CONTROL TO CHANGE ALT	10.00	I
1P 10	MON VERBAL REPORT	0.70	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
160093	CONTROL AIRCRAFT - F (120 SEC PROC)		▽
090039	FLIGHT INSTRUMENT SCAN - F		▽
160041	MON VOR/RMI-1		▽
4A 65	MANUALLY CONTROL A/C	120.00	□
3R 65	MON COMMAND BAR ATTITUDE INDIC ON FDI	120.00	□
3R 57	MON PITCH ATTITUDE INDIC ON FDI	120.00	□
3L 03	MON VERTICAL SPEED INDIC	120.00	□
3A 11	MONITOR AIRSPEED INDIC	120.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	120.00	□
5G 04	MON VOR POINTER NO.1 ON VOR/RMI 1 INDIC	2.00	I
5G 05	MON VOR POINTER NO.2 ON VOR/RMI 1 INDIC	2.00	I
160041	MON VOR/RMI-1		▽
5G 05	MON VOR POINTER NO.2 ON VOR/RMI 1 INDIC	2.00	I
5G 04	MON VOR POINTER NO.1 ON VOR/RMI 1 INDIC	2.00	I
160009	CONTROL AIRCRAFT - B (10 SEC PROC)		▽
090003	FLIGHT INSTRUMENT SCAN - A		▽
160041	MON VOR/RMI-1		▽
3A 10	MONITOR AIRSPEED INDIC	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	I
5G 04	MON VOR POINTER NO.1 ON VOR/RMI 1 INDIC	2.00	I
5G 05	MON VOR POINTER NO.2 ON VOR/RMI 1 INDIC	2.00	I

4900. 5400. 5900. 6400. 6900. 7400. 7900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
4A 64	MANUALLY CONTROL A/C	10.00	I
3R 64	MON COMMAND BAR	10.00	I
	ATTITUDE INDIC ON		
	FDI		
3R 10	MON PITCH ATTITUDE	10.00	I
	INDIC ON FDI		
3L 02	MON VERTICAL SPEED	10.00	I
	INDIC		
090017	FLIGHT INSTRUMENT		▽
	SCAN - C		
160091	CONTROL AIRCRAFT - D		▽
	(60 SEC PROC)		
3L 02	MON VERTICAL SPEED	30.00	0
	INDIC		
3A 10	MONITOR AIRSPEED	30.00	0
	INDIC		
3S 01	MONITOR A/C HEADING	30.00	0
	RELATIVE TO SELECTED		
	HOG ON CI		
4A 65	MANUALLY CONTROL A/C	60.00	□
3R 64	MON COMMAND BAR	60.00	□
	ATTITUDE INDIC ON		
	FDI		
3R 56	MON PITCH ATTITUDE	30.00	0
	INDIC ON FDI		
140023	REPORT 1000 FT TO		▽
	LEVEL OFF		
1P 11	MON VERBAL REPORT	1.70	I
160041	MON VOR/RMI-1		▽
5G 04	MON VOR POINTER NO.1	2.00	I
	ON VOR/RMI 1 INDIC		
5G 05	MON VOR POINTER NO.2	2.00	I
	ON VOR/RMI 1 INDIC		
160026	LEVEL OFF AT 4500 FT		▽
140003	ALTITUDE CHANGE PROC		▽
3F 01	MON MACH NO INDIC	2.37	I
4A 29	ACT FLT CONTROL TO	10.00	I
	CHANGE ALT		
3L 02	MON VERTICAL SPEED	10.00	I
	INDIC		
3H 02	MON CORR BARO ALT	0.60	I
	INDIC		
3R 10	MON PITCH ATTITUDE	10.00	I
	INDIC ON FDI		
4B 03	ACTUATE BOTH	2.02	I
	THROTTLES		

4900. 5400. 5900. 6400. 6900. 7400. 7900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
160038	SET DECISION HEIGHT ON RADIO ALTIMETER		▽
160093	CONTROL AIRCRAFT - F (120 SEC PROC)		▽
090039	FLIGHT INSTRUMENT SCAN - F		▽
9R 57	MON PITCH ATTITUDE INDIC ON FDI	120.00	□
9L 03	MON VERTICAL SPEED INDIC	120.00	□
3A 11	MONITOR AIRSPEED INDIC	120.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	120.00	□
4A 65	MANUALLY CONTROL A/C	120.00	□
3R 65	MON COMMAND BAR ATTITUDE INDIC ON FDI	120.00	□
160039	SET ADF-1 TO LAKE- SIDE -375KC		▽
1P 02	MON VERBAL REPORT	1.50	I
160040	SET ADF-2 TO LAKE- SIDE -375		▽
1P 02	MON VERBAL REPORT	1.50	I
160027	RECEIVE INSTRUCTIONS TO SLOW TO 160 KIAS.		▽
1B 37	MONITOR VHF-2 COMM	4.00	I
1P160063	MON RADIO COMM - [NASA 515, REDUCE SPEED TO ONE SIX ZERO KNOTS, OVER]	4.00	I
160042	MON ADF/RMI-1		▽
5D 29	MON ADF POINTER NO.2 ON ADF/RMI 1 INDIC	2.00	I
5D 28	MON ADF POINTER NO.1 ON ADF/RMI 1 INDIC	2.00	I
160020	REDUCE THRUST		▽
4B 07	MAKE MINOR THRUST ADJUSTMENT	2.73	I
160041	MON VOR/RMI-1		▽
5G 05	MON VOR POINTER NO.2 ON VOR/RMI 1 INDIC	2.00	I
5G 04	MON VOR POINTER NO.1 ON VOR/RMI 1 INDIC	2.00	I
160029	REACH 160 KIAS		▽

4980. 5480. 5980. 6480. 6980. 7480. 7980.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
4B 07	MAKE MINOR THRUST ADJUSTMENT	2.73	I
160042	MON ADF/RMI-1		▽
5D 29	MON ADF POINTER NO.2	2.00	I
	ON ADF/RMI 1 INDIC		
5D 28	MON ADF POINTER NO.1	2.00	I
	ON ADF/RMI 1 INDIC		
160041	MON VOR/RMI-1		▽
5G 04	MON VOR POINTER NO.1	2.00	I
	ON VOR/RMI 1 INDIC		
5G 05	MON VOR POINTER NO.2	2.00	I
	ON VOR/RMI 1 INDIC		
160090	CONTROL AIRCRAFT - C (30 SEC PROC)		▽
090017	FLIGHT INSTRUMENT SCAN - C		▽
3R 64	MON COMMAND BAR ATTITUDE INDIC ON FDI	30.00	0
3R 56	MON PITCH ATTITUDE INDIC ON FDI	30.00	0
3L 02	MON VERTICAL SPEED INDIC	30.00	0
3A 10	MONITOR AIRSPEED INDIC	30.00	0
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HQS ON C1	30.00	0
4A 64	MANUALLY CONTROL A/C	30.00	0
160089	CONTROL AIRCRAFT - B (10 SEC PROC)		▽
160089	CONTROL AIRCRAFT - B (10 SEC PROC)		▽
3R 64	MON COMMAND BAR ATTITUDE INDIC ON FDI	10.00	I
4A 64	MANUALLY CONTROL A/C	10.00	I
3R 64	MON COMMAND BAR ATTITUDE INDIC ON FDI	10.00	I
4A 64	MANUALLY CONTROL A/C	10.00	I
160042	MON ADF/RMI-1		▽
5D 29	MON ADF POINTER NO.2	2.00	I
	ON ADF/RMI 1 INDIC		
5D 28	MON ADF POINTER NO.1	2.00	I
	ON ADF/RMI 1 INDIC		

4900. 5400. 5900. 6400. 6900. 7400. 7900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
160089	CONTROL AIRCRAFT - B (10 SEC PROC)		▽
090003	FLIGHT INSTRUMENT SCAN - A		▽
160030	RECEIVE INSTRUCTIONS TO TURN TO HDG 180		▽
160041	MON VOR/RMI-1		▽
5G 04	MON VOR POINTER NO.1 ON VOR/RMI 1 INDIC	2.00	I
5G 05	MON VOR POINTER NO.2 ON VOR/RMI 1 INDIC	2.00	I
4A 64	MANUALLY CONTROL A/C	10.00	I
3R 64	MON COMMAND BAR ATTITUDE INDIC ON FDI	10.00	I
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
3L 02	MON VERTICAL SPEED INDIC	10.00	I
3A 10	MONITOR AIRSPEED INDIC	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	I
1B 18	MON VHF-2 COMM AUDIO	3.50	I
1P160026	MON RADIO COMM - [NASA 515, TURN LEFT HEADING ONE EIGHT ZERO, OVER]	3.50	I
160031	TURN TO HDG 180		▽
140007	HEADING CHANGE PROC.		-▽
3L 02	MON VERTICAL SPEED INDIC	10.00	I
3S 11	SET COURSE DIGITS AND POINTER ON CI USING COURSE CURSOR CONT	4.92	I
3R 58	MON A/C ATTITUDE RELATIVE TO ROLL COMMAND ON FDI	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	I
4A 28	ACT FLT CONTROL TO CHANGE HDG	10.00	I

4900. 5400. 5900. 6400. 6900. 7400. 7900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
160091	CONTROL AIRCRAFT - D (60 SEC PROC)		▽
090019	FLIGHT INSTRUMENT SCAN - D		▽
4A 65	MANUALLY CONTROL A/C	60.00	□
3R 64	MON COMMAND BAR ATTITUDE INDIC ON FDI	60.00	□
3R 56	MON PITCH ATTITUDE INDIC ON FDI	60.00	□
3L 02	MON VERTICAL SPEED INDIC	60.00	□
3A 10	MONITOR AIRSPEED INDIC	60.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON CI	60.00	□
160042	MON ADF/RMI-1		▽
50 20	MON ADF POINTER NO.1 ON ADF/RMI 1 INDIC	2.00	I
50 29	MON ADF POINTER NO.2 ON ADF/RMI 1 INDIC	2.00	I
160032	TURN COMPLETE - ON HOG 180		▽
160033	RECEIVE FINAL APPROACH INSTRUCTION		▽
160041	MON VOR/RMI-1		▽
5G 05	MON VOR POINTER NO.2 ON VOR/RMI 1 INDIC	2.00	I
1B 37	MONITOR VHF-2 COMM	15.00	I
1P160028	MON RADIO COMM - (NASA S15, YOU ARE FOURTEEN MILES FROM THE OUTER MARKER.	3.21	I
5G 04	MON VOR POINTER NO.1 ON VOR/RMI 1 INDIC	2.00	I
1P160029	TURN LEFT HEADING ONE TWO ZERO FOR VECTOR TO INTERCEPT FINAL APPROACH	4.20	I
1P160030	COURSE. YOU ARE CLEARED FOR AN ILS RUNWAY ZERO EIGHT APPROACH. CONTACT	4.20	I

4900. 5400. 5900. 6400. 6900. 7400. 7900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P160031	TOWER AT THE OUTER MARKER ON ONE ONE NINER POINT FIVE, OVER)	3.21	I
160088	CONTROL AIRCRAFT - A (5 SEC PROC)		▽
090009	FLIGHT INSTRUMENT SCAN - B		▽
4A 64	MANUALLY CONTROL A/C	5.00	I
3R 64	MON COMMAND BAR ATTITUDE INDIC ON FDI	5.00	I
3R 56	MON PITCH ATTITUDE INDIC ON FDI	5.00	I
3L 02	MON VERTICAL SPEED INDIC	5.00	I
3A 10	MONITOR AIRSPEED INDIC	5.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	5.00	I
160035	BEGIN TURN TO HDG 120		▽
140007	HEADING CHANGE PROC.		▽
3L 02	MON VERTICAL SPEED INDIC	10.00	I
3S 11	SET COURSE DIGITS AND POINTER ON CI USING COURSE CURSOR CONT	4.92	I
3R 58	MON A/C ATTITUDE RELATIVE TO ROLL COMMAND ON FDI	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	10.00	I
4A 28	ACT FLT CONTROL TO CHANGE HDG	10.00	I
160043	TUNE NAV-1 TO RWY 08		▽
160091	ILS -109.9 CONTROL AIRCRAFT - D (60 SEC PROC)		▽
090019	FLIGHT INSTRUMENT SCAN - D		▽
3L 02	MON VERTICAL SPEED INDIC	60.00	□

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CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
3A 10	MONITOR AIRSPEED INDIC	60.00	□
3S 15	MONITOR A/C HEADING RELATIVE TO SELECTED HEADING ON C1	60.00	□
1P 02	MON VERBAL REPORT	1.50	I
4A 65	MANUALLY CONTROL A/C	60.00	□
3R 64	MON COMMAND BAR ATTITUDE INDIC ON FDI	60.00	□
3R 56	MON PITCH ATTITUDE INDIC ON FDI	60.00	□
160042	MON ADF/RMI-1		▽
50 29	MON ADF POINTER NO.2 ON ADF/RMI 1 INDIC	2.00	I
50 28	MON ADF POINTER NO.1 ON ADF/RMI 1 INDIC	2.00	I
160041	MON VOR/RMI-1		▽
5G 04	MON VOR POINTER NO.1 ON VOR/RMI 1 INDIC	2.00	I
5G 05	MON VOR POINTER NO.2 ON VOR/RMI 1 INDIC	2.00	I
160036	TURN COMPLETE - ON Hdg 120		▽
160009	CONTROL AIRCRAFT - B (10 SEC PROC)		▽
090003	FLIGHT INSTRUMENT SCAN - A		▽
3A 10	MONITOR AIRSPEED INDIC	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED Hdg ON C1	10.00	I
4A 64	MANUALLY CONTROL A/C	10.00	I
3R 64	MON COMMAND BAR ATTITUDE INDIC ON FDI	10.00	I
3R 10	MON PITCH ATTITUDE INDIC ON FDI	10.00	I
3L 02	MON VERTICAL SPEED INDIC	10.00	I
160008	CONTROL AIRCRAFT - A (5 SEC PROC)		▽
090009	FLIGHT INSTRUMENT SCAN - B		▽
4A 64	MANUALLY CONTROL A/C	5.00	I

4980. 5480. 5980. 6480. 6980. 7480. 7980.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
3R 64	MON COMMAND BAR ATTITUDE INDIC ON FDI	5.00	I
3R 56	MON PITCH ATTITUDE INDIC ON FDI	5.00	I
3L 02	MON VERTICAL SPEED INDIC	5.00	I
3A 10	MONITOR AIRSPEED INDIC	5.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HOG ON CI	5.00	I
160037	CAPTURE JLS LOC BEGIN TURN TO HOG 090		▽
4A 20	ACT FLT CONTROL TO CHANGE HOG	10.00	I
3R 16	MONITOR INDICATION OF DEVIATION FROM LOCALIZER ON FDI	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HOG ON CI	10.00	I
1P 02	MON VERBAL REPORT	1.30	I
3V 06	MON LOC ANNUN LT GREEN	1.21	I
160042	MON ADF/RMI-1		▽
5D 29	MON ADF POINTER NO.2 ON ADF/RMI 1 INDIC	2.00	I
5D 20	MON ADF POINTER NO.1 ON ADF/RMI 1 INDIC	2.00	I
1P160060	CALL OUT-[I HAVE NAV 2 DATA]	1.50	I
3S 11	SET COURSE DIGITS AND POINTER ON CI USING COURSE CURSOR CONT	2.07	I
160041	MON VOR/RMI-1		▽
3R 16	MONITOR INDICATION OF DEVIATION FROM LOCALIZER ON FDI	10.00	I
3S 01	MONITOR A/C HEADING RELATIVE TO SELECTED HOG ON CI	10.00	I
5G 04	MON VOR POINTER NO.1 ON VOR/RMI 1 INDIC	2.00	I

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CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
5G 05	MON VOR POINTER NO.2	2.00	I
4A 28	ON VOR/RMI 1 INDIC	10.00	I
160044	ACT FLT CONTROL TO CHANGE HDG		▽
160046	TURN COMPLETE - ON HDG.090 -RWY 08 HDG		▽
4A 30	CONTROL AIRCRAFT ON FINAL APP - A (10)	10.00	I
9R 16	ACT FLT CONT TO ALIGNA/C WITH ATT INDICATORS	3.00	I
3S 01	MONITOR INDICATION OF DEVIATION FROM LOCALIZER ON FDI	10.00	I
160072	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI		▽
3S 04	CONTROL AIRCRAFT ON FINAL APP - B(240)	240.00	▬
4A 30	MON A/C POSITION RELATIVE TO SELECTED COURSE ON CI	240.00	▬
9R 16	ACT FLT CONT TO ALIGNA/C WITH ATT INDICATORS	240.00	▬
160050	MONITOR INDICATION OF DEVIATION FROM LOCALIZER ON FDI		▽
1B 18	RECEIVE INSTRUCTIONS TO SLOW TO 150	3.50	I
1P160034	MON VHF-2 COMM AUDIO	3.50	I
160051	MON RADIO COMM- (NASA 515, REDUCE SPEED TO ONE FIVE ZERO KNOTS OVER)		▽
3A 01	REDUCE SPEED TO 150 KIAS	0.60	I
4B 07	MONITOR INDICATED AIRSPEED INDIC	2.73	I
160052	MAKE MINOR THRUST ADJUSTMENT		▽
160055	REACH 150 KIAS		▽
160053	RECEIVE INSTRUCTIONS TO MAINTAIN CURRENT SPEED		▽
	SET FLAPS TO FLAPS 25		▽

4900. 5400. 5900. 6400. 6900. 7400. 7900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1B 10	MON VHF-2 COMM AUDIO	3.50	I
1P160036	MON RADIO COMM - [NASA 515, MAINTAIN CURRENT SPEED UNTIL CROSSING STUBBS, OVER	3.50	I
1P160070	CALL OUT - [FLAPS 25]	0.70	I
3A 01	MONITOR INDICATED AIRSPEED INDIC	0.60	I
4B 07	MAKE MINOR THRUST ADJUSTMENT	2.73	I
160054	ACQUIRE GLIDESLOPE		▽
3R 60	MON INITIAL MOVEMENT OF GLIDE SLOPE	2.58	I
1P 10	MON VERBAL REPORT	1.00	I
3V 09	MON GLIDE SLOPE	1.21	I
160056	ANNUN LT GREEN BEGIN DECELERATION TO 135 KNOTS		▽
1P 10	MON VERBAL REPORT	1.00	I
3A 01	MONITOR INDICATED AIRSPEED INDIC	0.60	I
4B 07	MAKE MINOR THRUST ADJUSTMENT	2.73	I
160057	SET FLAPS TO FLAPS 40		▽
160069	SET SPEED BRAKES		▽
1P160073	CALL OUT - [FLAPS 40]	0.70	I
4F 02	SET SPEED BRAKE LEVER TO ARM	3.26	I
4F 07	MONITOR SPEED BRAKE LEVER ARMED LT GREEN	0.73	I
160059	CROSS RHY XX OUTER MARKER		▽
3V 09	MON GLIDE SLOPE	1.21	I
3V 11	ANNUN LT GREEN MONITOR OUTER MARKER LT ON AND AUDIBLE SIGNAL	0.72	I
3N 03	START ELAPSED TIME INDIC	2.10	I
3V 06	MON LOC ANNUN LT GREEN	1.21	I
1P160075	CALL OUT - [GEAR DOWN AND LANDING CHECK-LIST]	1.00	I

4980. 5480. 5980. 6480. 6980. 7480. 7980.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
160073	CONTROL A/C ON FINAL APPROACH - C (5)		▽
4A 30	ACT FLT CONT TO ALIGN/A/C WITH ATT INDICATORS	5.00	I
3R 61	MON INDICATION OF DEVIATION FROM LOCALIZE AND GLIDE SLOPE ON FDI	5.00	I
3S 04	MON A/C POSITION RELATIVE TO SELECTED COURSE ON CI	5.00	I
160064	CROSS RHY 00 MIDDLE MARKER		▽
160065	DESCEND THRU -DECISION HEIGHT		▽
160066	CONTROL AIRCRAFT THRU TOUCHDOWN		▽
160050	REPORT RUNWAY IN SIGHT		▽
4A 68	MANUALLY CONT A/C	26.00	□
3V 13	MONITOR MIDDLE MARKER ANNUN LT ON AND AUDIBLE SIGNAL	1.91	I
1P 10	MON VERBAL REPORT	1.00	I
1P 11	MON VERBAL REPORT	0.00	I
160067	CROSS END OF RHY 00		▽
160068	TOUCHDOWN		▽
4M 04	ACTUATE NOSE GEAR STEERING USING RUDDER PEDALS	50.00	□
0A 02	CAPT VIEW THRU NO.1 WINDOW	50.00	□
4B 08	SET THRUST LEVERS TO IDLE	2.50	I
4A 31	MANUALLY CONTROL A/C	75.00	□
4C 01	SET THRUST REVERSER LEVERS TO ON	21.00	□
4C 02	SET THRUST REVERSER LEVERS TO OFF	2.76	I
4F 01	SET SPD BRAKE LEVER TO DOWN	3.26	I
160071	HANDOFF TO GROUND CONTROL -121.9		▽

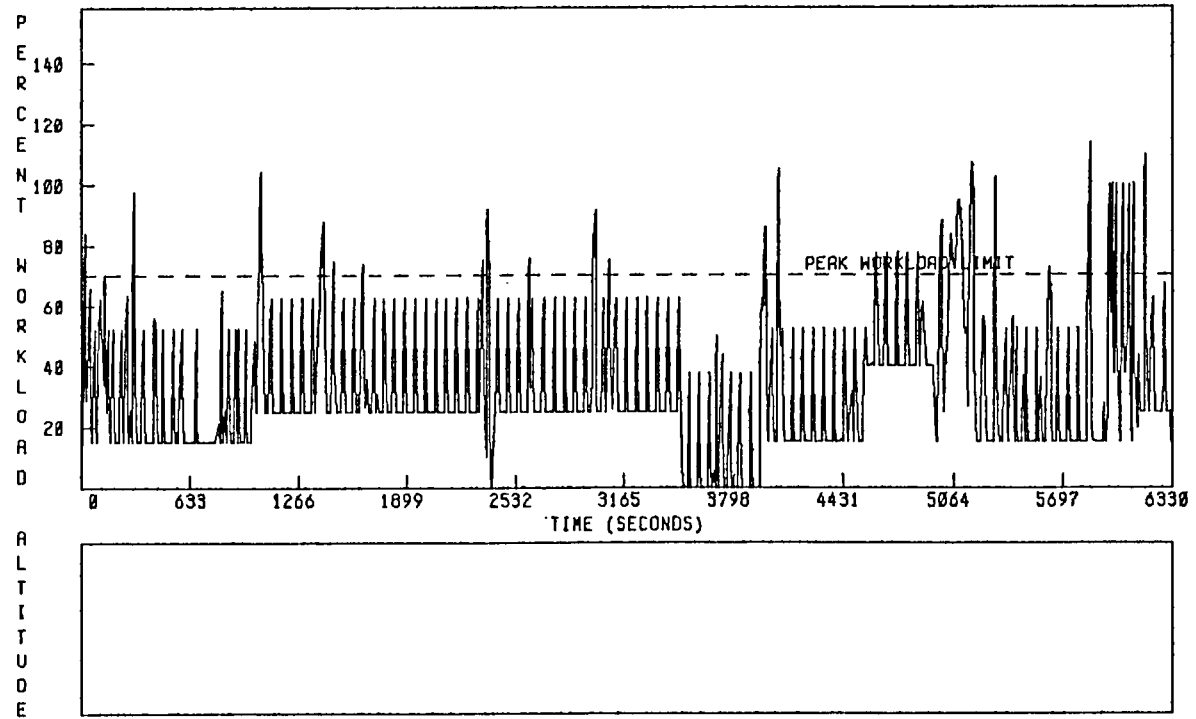
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CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P160087	MON RADIO COMM - [NASA 515, EXIT RUN- WAY NEXT INTERSEC- TION. CONTACT GROUND	3.50	I
1B 18	MON VHF-2 COMM AUDIO	6.00	I
1P160088	POINT NINER WHEN CLEAR OF RUNWAY. OVER]	2.50	I
1B 18	MON VHF-2 COMM AUDIO	3.50	I
1P160091	MON RADIO COMM - [NASA 515, ATLANTA GROUND, TAXI TO RAMP VIA NORTHEAST-SOUTH- WEST TAXIWAY. OVER]	3.50	I
1P160092		1.00	I
			4900. 5400. 5900. 6400. 6900. 7400. 7900.

UNSHIFTED
NOVEM 1978

WORKLOAD HISTOGRAM
CREWMEMBER- COPILOT
CHANNEL- TOTAL VISION
CONFIGURATION- NASA 515 - FFD

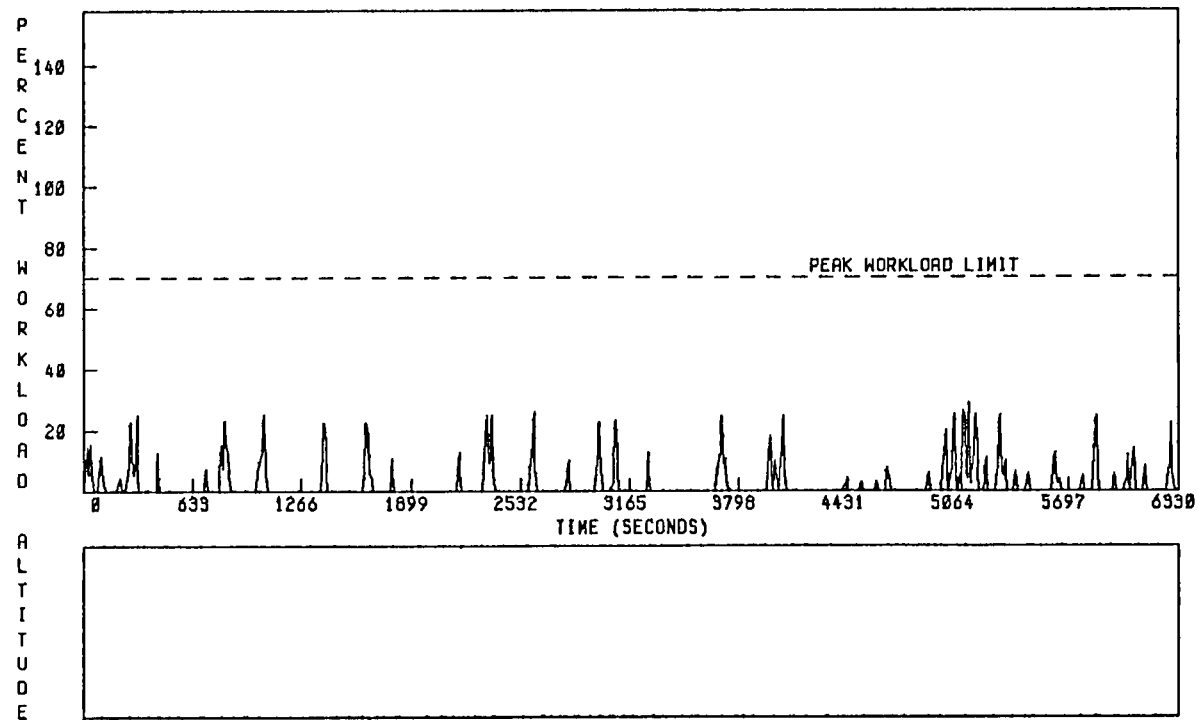
MISSION
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MANUAL CONTROL



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CREWMEMBER- COPILOT
CHANNEL- TOTAL MOTOR
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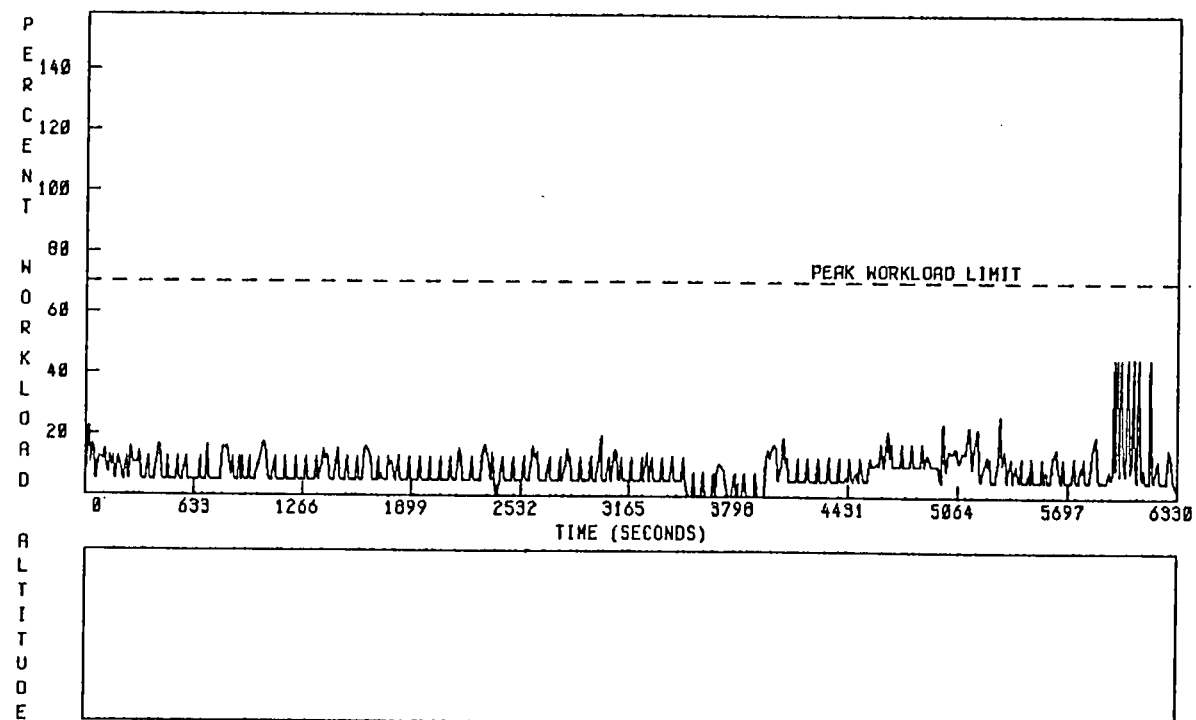
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CHANNEL- COGNITION
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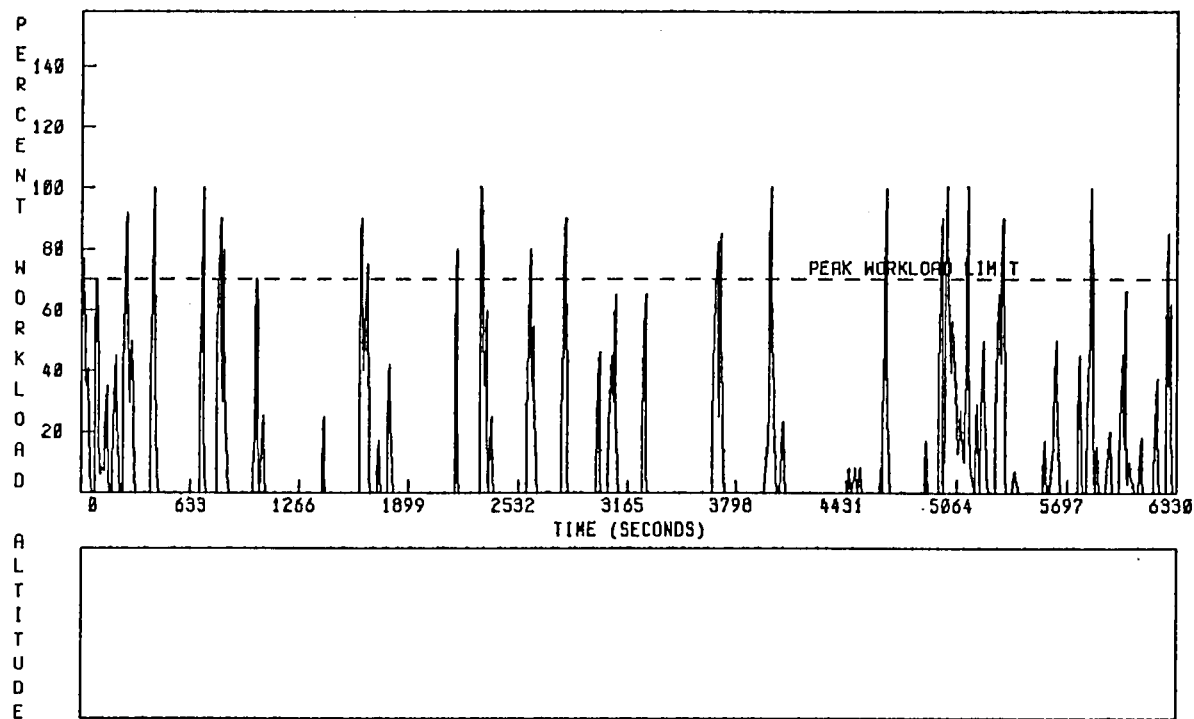
MISSION
MSN11N FLT PHASES
MANUAL CONTROL



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WORKLOAD HISTOGRAM
CREWMEMBER- COPILOT
CHANNEL- TOTAL COMMUNICATION
CONFIGURATION- NASA 515 - FFD

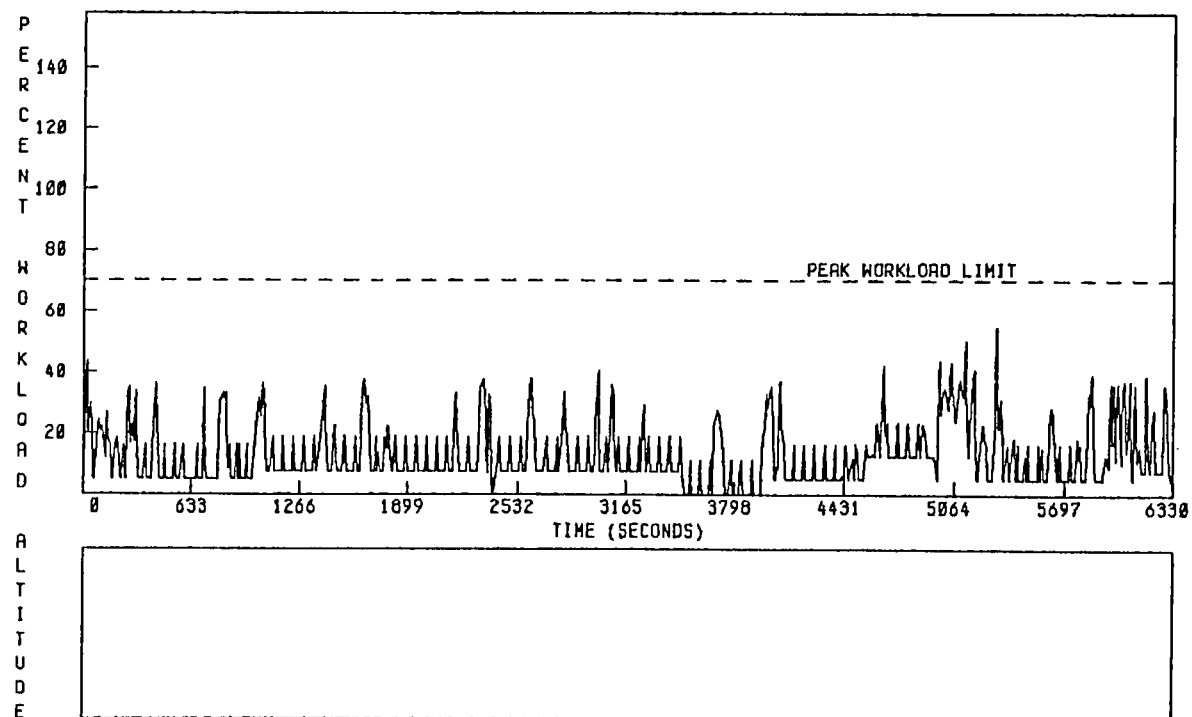
MISSION
MSN1IN FLT PHASES
MANUAL CONTROL



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WORKLOAD HISTOGRAM
CREWMEMBER- COPILOT
CHANNEL- WEIGHTED CHANNEL AVERAGE
CONFIGURATION- NASA 515 - FFD

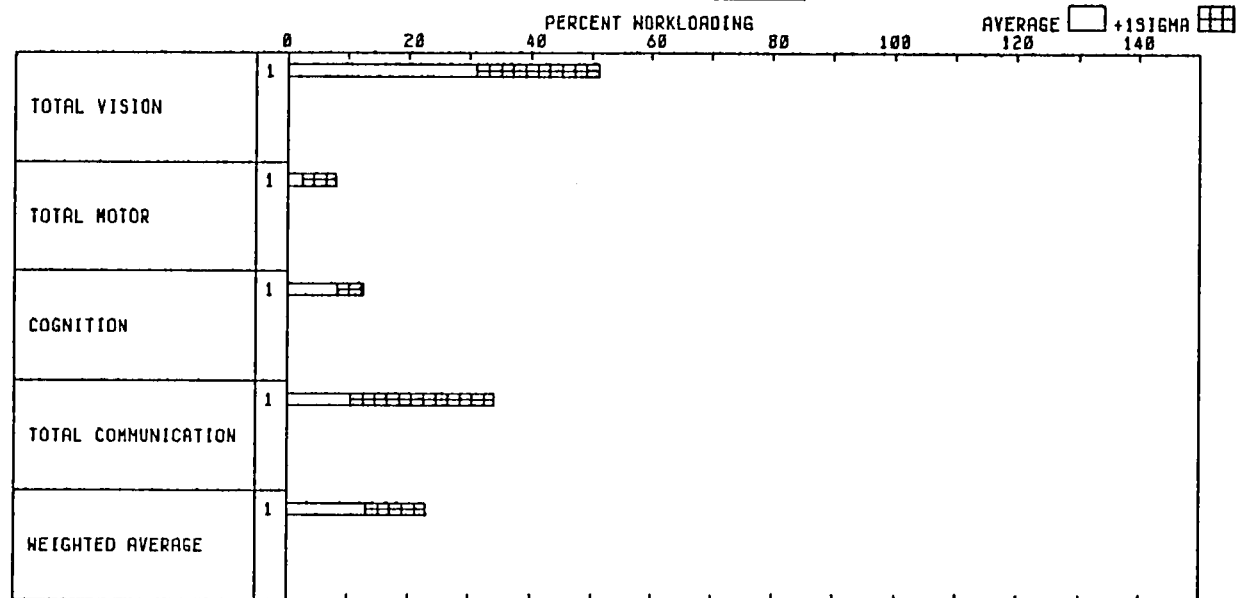
MISSION
MSN11N FLT PHASES
MANUAL CONTROL



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WORKLOAD SUMMARY
CREWMEMBER - COPILOT

NOVEM 1978



MISSION
1 MSN11N FLT PHASES
MANUAL CONTROL

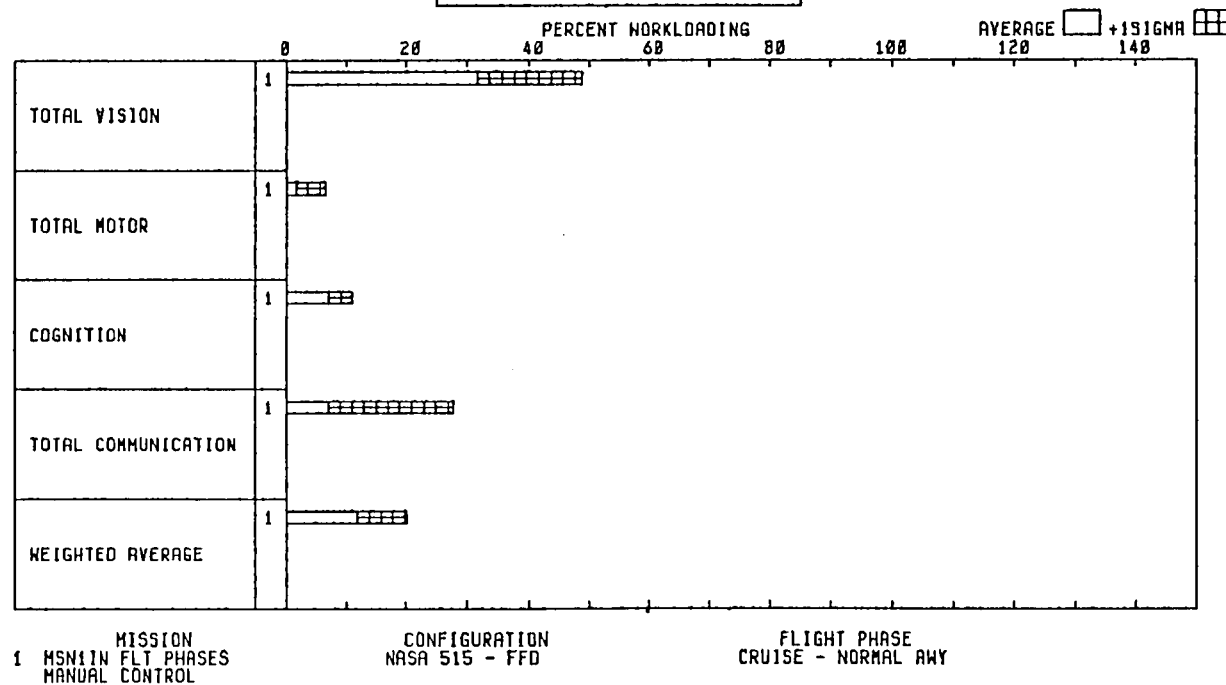
CONFIGURATION
NASA 515 - FFD

FLIGHT PHASE
NOISE ABATEMENT
CLIMB - NORMAL RWY-
FFD

UNSHIFTED

WORKLOAD SUMMARY CREWMEMBER - COPILOT

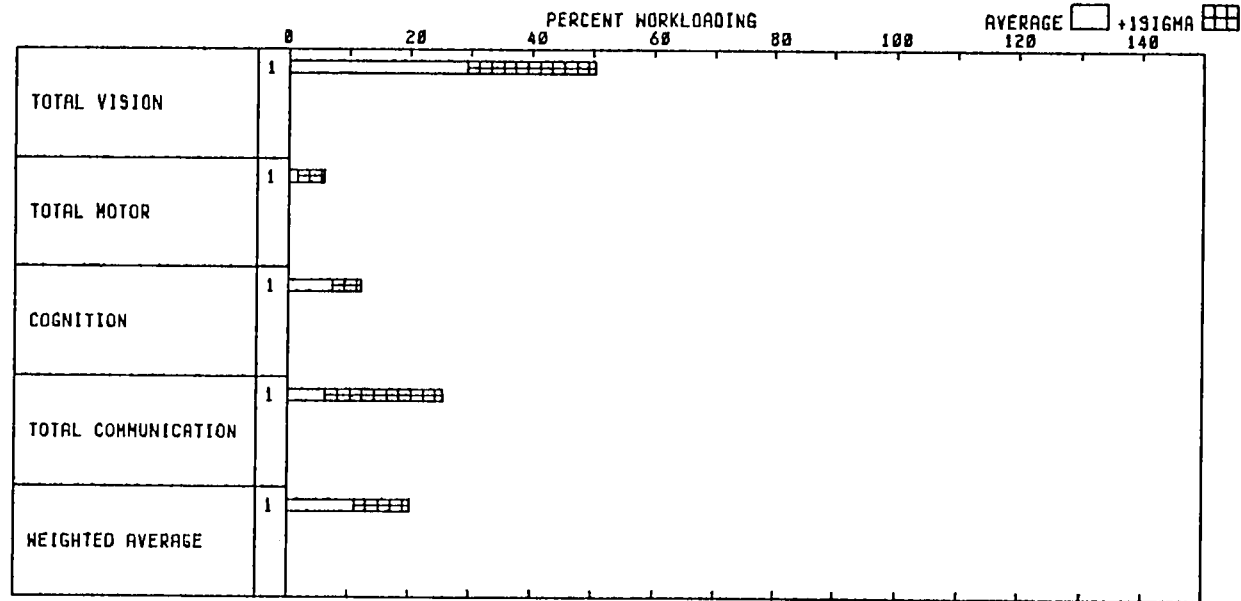
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UNSHIFTED

WORKLOAD SUMMARY
CREWMEMBER - COPILOT

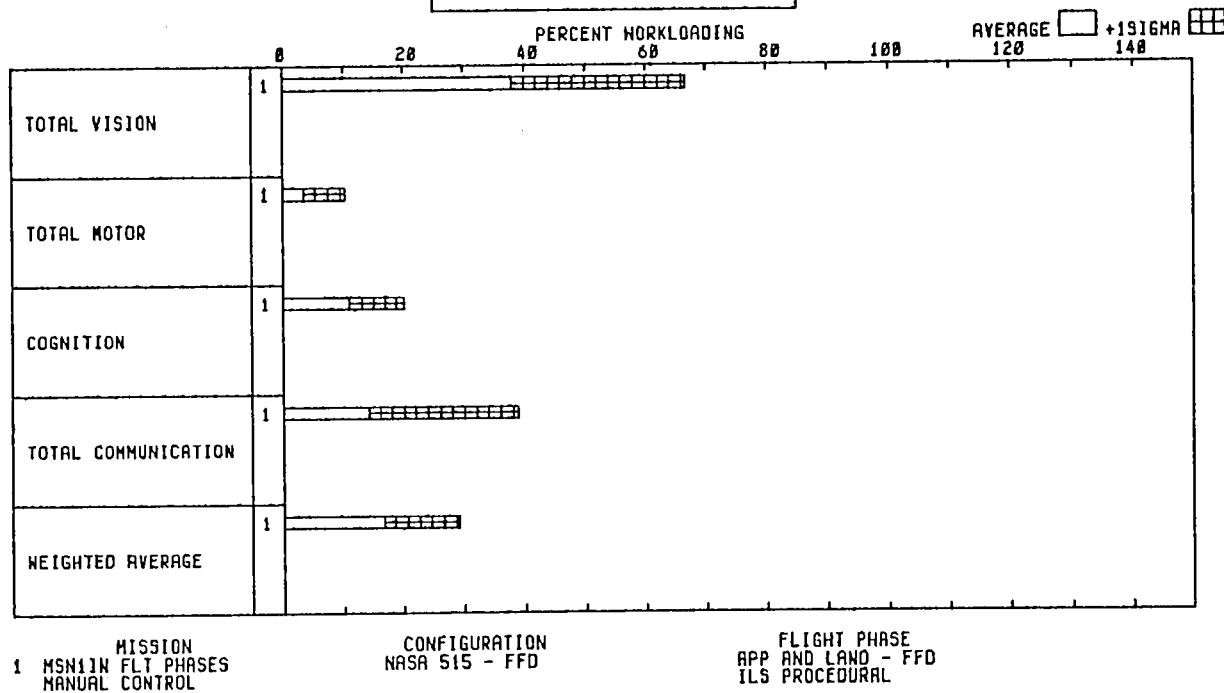
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MISSION
1 MSN11N FLT PHASES
MANUAL CONTROL

CONFIGURATION
NASA 515 - FFD

FLIGHT PHASE
DESCENT - FFD



UNSHIFTED

MISSION TIMELINE
MISSION - MSN11N FLT PHASES
MANUAL CONTROL
CONFIGURATION - NASA 515 - FFD
FLIGHT PHASE - NOISE ABATEMENT
CLIMB - NORMAL ANY-
FFD
CREWMEMBER - COPILOT

NOVEM 1978

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
090001	CONTACT DEPARTURE CONTROL 125.7		
00EV18	C/P EXT VIS SCAN		
1B 18	MON VHF-2 COMM AUDIO	6.00	
1P090001	MON RADIO COMM - [NASA 515, CONTACT ATLANTA DEPARTURE ON ONE TWO FIVE POINT CRWMBR EXTERNAL VISION SCAN	4.50	
0A 14	SEVEN, GOOD-DAY SIR]	1000.00	
1P090024	ACT PUSH-TO-TALK SW ON HANDGRIP	1.50	
1B 14	COMM VIA VHF-2 RADIO COMM -[NASA 515, ROGER]	1.70	
1B 15	SET VHF-2R FREQ - WHOLE NO.5	1.70	
1P090002	MON VHF-2R FREQ IND	2.00	
1B 08	SET VHF-2R FREQ - FRACTIONS	4.00	
1B 07	SET VHF-2 COMM TFR SW TO RIGHT	1.90	
1B 06	ACT COMM 2 PTT SW	1.45	
1B 13	COMM VIA VHF-2 RADIO COMM -[ATLANTA DEPARTURE CONTROL. THIS IS NASA 515, OVER]	1.42	
1B 16	ENGINE INSTRUMENT SCAN	3.50	
1P090003	MON ENG NO 1 EPR IND	0.44	
030007	MON ENG NO 2 EPR IND	0.44	
7F 25	MON NO 2 ENG N1 IND	0.44	
7F 30	MON NO 1 ENG N1 IND	0.44	
7F 22	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 21			
7F 32			

CODE		EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F	24	MON NO 2 ENG N2 IND	0.44	
7F	23	MON NO 1 ENG N2 IND	0.44	
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F	10	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44	
1P090005		MON RADIO COMM- [NASA 515. ATLANTA DEPARTURE, ROGER. SQUAWK IDENT]	3.50	
1B	10	MON VHF-2 COMM AUDIO	3.50	
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F	11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F	20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
7F	12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
090005		COMPLETE TURN - ON HOG 105		7
1N	07	PRESS ATC IDENT SW	2.14	
1N	18	MON ATC TEST LT ON	1.50	
1B	19	MON VHF-2 COMM AUDIO	3.20	
1P090006		MON RADIO COMM - [NASA 515. RADAR CONTACT. SAY ALTI- TUD, OVER]	3.20	
090006		RETRACT FLAPS TO FLAPS 1. SET CLIMB THRUST.		7
1P090007		RADIO COMM -[NASA 515. LEAVING ONE EIGHT HUNDRED]	2.30	
1B	13	ACT COMM 2 PTT SW	3.50	
1B	16	COMM VIA VHF-2	2.30	
1P	10	MON VERBAL REPORT	0.60	
4E	07	SET FLAP CONT LEVER TO FLAPS 1	2.69	
				0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
4E 15	MONITOR FLAP POSITION INDICATOR	2.23	I
4N 03	MON LE FLAPS-IN-TRANSIT LT ON	1.17	I
4N 04	MON LE FLAPS-IN-TRANSIT LT OFF	1.17	I
1P090063	CALL OUT-[FLAPS 1]	0.80	I
1B 03	SET VHF-2L FREQ - FRACTIONS	1.98	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	I
7F 20	MON NO 2 ENG VIBRATION AMPLITUDE INDIC	0.44	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I

CODE		EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F	24	MON NO 2 ENG N2 IND	0.44	I
7F	23	MON NO 1 ENG N2 IND	0.44	I
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F	10	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F	11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F	20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F	12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
090010		RECEIVE INSTRUCTIONS: TO TURN TO HOG 070 TO INTERCEPT J37		▽
1P090025		MON RADIO COMM - [NASA 515, FOR VEC- TOR TO INTERCEPT JAY THIRTY SEVEN, TURN	3.00	I
1B	19	MON VHF-2 COMM AUDIO	7.00	I
1P090026		LEFT HEADING ZERO SEVEN ZERO, CLIMB AND MAINTAIN NINER THOUSAND, OVER]	4.00	I
1P090027		RADIO COMM -[NASA 515, ROGER. LEFT HEADING ZERO SEVEN ZERO, MAINTAIN NINER	4.00	I
1B	24	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	4.50	I
1B	16	COMM VIA VHF-2	4.50	I
1P090028		THOUSAND.]	0.50	I
030007		ENGINE INSTRUMENT SCAN		▽
7F	25	MON ENG NO 1 EPR IND	0.44	I
7F	30	MON ENG NO 2 EPR IND	0.44	I
7F	22	MON NO 2 ENG N1 IND	0.44	I

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
090012	COMPLETE TURN - ON HDG 070		▽
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
090011	RETRACT FLAPS TO FLAPS 0.		▽
1P 10	MON VERBAL REPORT	0.60	I
4E 06	SET FLAP CONT LEVER TO FLAPS 0	2.69	I
4E 15	MONITOR FLAP POSITION INDICATOR	2.23	I
090013	REACH 250 KIAS		▽
4N 03	MON LE FLAPS-IN- TRANSIT LT ON	1.17	I
4N 04	MON LE FLAPS-IN- TRANSIT LT OFF	1.17	I
1P090064	CALL OUT - [FLAPS ZERO]	0.80	I
090014	AFTER TAKEOFF CHECK- LIST		▽
1P 10	MON VERBAL REPORT	0.70	I
090001	READ NEXT ITEM ON CHECKLIST ON CONTROL COLUMN PLACARD	1.00	I

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS	
7M 12	CHECK ENG NO.1 START SW SET TO OFF	2.41	I	
7M 13	CHECK THAT ENG NO.2 START SW SET TO OFF	0.78	I	
1P090019	CALL OUT - [OFF]	0.50	I	
0B090001	READ NEXT ITEM ON CHECKLIST ON CONTROL COLUMN PLACARD	1.00	I	
1P090020	CALL OUT - [LANDING GEAR]	0.90	I	
4D 00	MON NOSE GEAR UNLOCKED LT OFF	0.72	I	
4D 11	MON LEFT/RT GEAR UNLOCKED LT ON	0.54	I	
1P090021	CALL OUT - [UP AND OFF]	1.00	I	
0B090001	READ NEXT ITEM ON CHECKLIST ON CONTROL COLUMN PLACARD	1.00	I	
1P090022	CALL OUT - [FLAPS]	0.60	I	
1P090021	CALL OUT - [UP AND OFF]	1.00	I	
0B090001	READ NEXT ITEM ON CHECKLIST ON CONTROL COLUMN PLACARD	1.00	I	
1P090023	CALL OUT - [AFTER TAKEOFF CHECKLIST COMPLETE]	1.90	I	
030007	ENGINE INSTRUMENT SCAN		▽	
7F 30	MON ENG NO 2 EPR IND	0.44	I	
7F 25	MON ENG NO 1 EPR IND	0.44	I	
7F 21	MON NO 1 ENG N1 IND	0.44	I	
7F 22	MON NO 2 ENG N1 IND	0.44	I	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I	
7F 23	MON NO 1 ENG N2 IND	0.44	I	
7F 24	MON NO 2 ENG N2 IND	0.44	I	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I	

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
090015	RECEIVE CLEARANCE TO CLIMB TO 12000 FT		▽

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P090029	MON RADIO COMM - [NASA 515, CLIMB AND MAINTAIN ONE TWO THOUSAND, OVER]	3.50	I
1B 18	MON VHF-2 COMM AUDIO	3.50	I
1B 16	COMM VIA VHF-2	2.80	I
1P090030	RADIO COMM - [NASA 515, ROGER, MAINTAIN ONE TWO THOUSAND]	2.80	I
1B 24	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	2.80	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
090023	HANDOFF TO ATLANTA EAST DEPARTURE SEC- TOR. -123.95		▽

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P090008	MON RADIO COMM- (NASA 515, CLIMB AND MAINTAIN FLIGHT LVL 230. CONTACT ATLANTA	3.10	I
1B 19	MON VHF-2 COMM AUDIO	6.20	I
1P090009	CENTER ON ONE TWO THREE POINT NINER FIVE, OVER]	3.10	I
1B 26	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	7.00	I
1B 17	COMM VIA VHF-2	7.00	I
1P090010	RADIO COMM -[515, ROGER, CLIMB AND MAINTAIN FLIGHT LEVEL TWO THREE ZERO	3.50	I
1P090011	. CONTACT CENTER ON ONE TWO THREE POINT NINER FIVE, GOOD DAY]	3.50	I
1B 01	MON VHF-2L FREQ IND	4.00	I
1B 02	SET VHF-2L FREQ- WHOLE NO.5	2.90	I
1B 03	SET VHF-2L FREQ - FRACTIONS	1.98	I
1B 28	ACTUATE COMM 2 PUSH- TO-TALK SW	5.00	I
1B 17	COMM VIA VHF-2	5.00	I
1P090012	RADIO COMM - [ATLANTA CENTER, THIS IS NASA 515 OUT OF 11000 FOR FL230, OVER]	0.45	I
1P090013	MON VHF-2 COMM AUDIO	0.50	I
1B 18	MON RADIO COMM -	3.50	I
1P090014	[NASA 515, THIS IS ATLANTA CENTER, ROGER, SQUAWK IDENT]	3.50	I
1B 07	PRESS ATC IDENT SW	2.14	I
1B 18	MON VHF-2 COMM AUDIO	3.50	I
1P090015	MON RADIO COMM - [NASA 515, RADAR CONTACT. REPORT LEAVING FL210,OVER]	3.50	I
1B 24	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	3.50	I
1B 16	COMM VIA VHF-2	3.50	I

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P090016	RADIO COMM - (NASA 515, RAGER, REPORT FLIGHT LEVEL TWO ONE ZERO)	3.50	
090024	TUNE COMPANY AND EMERGENCY FREQ<S		▽
1A 01	MON VHF-1L FREQ IND	4.89	
1A 02	SET VHF-1L FREQ - WHOLE NO.S	2.98	
1A 03	SET VHF-1L FREQ - FRACTIONS	1.98	
1A 08	SET VHF-1R FREQ. WHOLE NO.S	2.98	
1A 07	MON VHF-1R FREQ IND	3.99	
1A 09	SET VHF-1R FREQ - FRACTIONS	1.98	
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	
7F 20	MON NO 2 ENG VIBRATION AMPLITUDE INDIC	0.44	

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 10	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
090025	RECEIVE NOTICE OF CONFLICTING TRAFFIC		▽
1P090031	MON RADIO COMM - [NASA 515, MAINTAIN FLIGHT LEVEL ONE EIGHT ZERO, TRAFFIC	3.75	I
1B 19	MON VHF-2 COMM AUDIO	10.00	I
1P090032	TWELVE O'CLOCK, FOUR MILES, NORTHEAST BOUND, C-130 ASSIGNED FLIGHT LEVEL ONE	5.00	I
1P090033	NINER ZERO, OVER]	1.25	I
0A 03	F.O. VIEW THRU NO.1 WINDOW	2.00	I
1B 17	COMM VIA VHF-2	5.00	I

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	I
7F 20	MON NO 2 ENG VIBRATION AMPLITUDE INDIC	0.44	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBRATION AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	I

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE		EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F	25	MON ENG NO 1 EPR IND	0.44	
7F	21	MON NO 1 ENG N1 IND	0.44	
7F	22	MON NO 2 ENG N1 IND	0.44	
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F	32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F	23	MON NO 1 ENG N2 IND	0.44	
7F	24	MON NO 2 ENG N2 IND	0.44	
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F	18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F	11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F	12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	
7F	20	MON NO 2 ENG VIBRATION AMPLITUDE INDIC	0.44	
090020		RECEIVE CLEARANCE TO RESUME CLIMB TO CRUISE ALTITUDE		▽
1B	19	MON VHF-2 COMM AUDIO	7.00	
1P090036		MON RADIO COMM - [NASA S15, CLEAR OF TRAFFIC, CLIMB AND MAINTAIN FLIGHT	3.00	
1P090037		LEVEL TWO THREE ZERO, REPORT LEAVING FLIGHT LEVEL TWO ONE ZERO, OVER]	4.00	
1B	17	COMM VIA VHF-2	4.00	
1P090038		RADIO COMM - [NASA S15, ROGER, MAINTAIN TWO THREE ZERO, REPORT LEAVING TWO	3.50	
1B	25	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	4.00	
1P090039		ONE ZERO.]	0.50	

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
090029	CLIMB THRU 23000 FT. HANDOFF TO SPARTANBURG HIGH SECTOR -133.7		▽
3H 02	MON CORR BARO ALT INDIC	0.60	
1P090045	RADIO COMM -[ATLANTA CENTER, THIS IS NASA 515 OUT OF FLIGHT	3.70	
1B 25	LEVEL TWO THREE ZERO ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	6.00	
1B 17	COMM VIA VHF-2 FOR TWO NINER ZERO.	6.00	
1P090046	OVER]	2.30	
1B 19	MON VHF-2 COMM AUDIO	7.00	
1P090041	MON RADIO COMM - [NASA 515, ROGER. CLIMB AND MAINTAIN FLIGHT LEVEL THREE ONE ZERO. CONTACT CENTER ON ONE THREE THREE POINT SEVEN.	3.50	
1P090042	OVER]		
1P090043	RADIO COMM -[NASA 515, ROGER. MAINTAIN FLIGHT LEVEL THREE ONE ZERO, CENTER ON ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP.	3.70	
1B 25	COMM VIA VHF-2 ONE THREE THREE POINT SEVEN.]	6.00	
1B 17	MON VHF-2R FREQ IND	6.00	
1P090044	SET VHF-2R FREQ - WHOLE NO.S	2.30	
1B 07	SET VHF-2R FREQ - FRACTIONS	4.86	
1B 08	SET VHF-2R FREQ -	2.88	
1B 09	SET VHF-2R FREQ -	1.98	
1B 06	SET VHF-2 COMM TFR SW TO RIGHT	1.45	
1P090045	RADIO COMM -[ATLANTA CENTER, THIS IS NASA 515 OUT OF FLIGHT	3.70	
1B 28	LEVEL TWO THREE ZERO ACTUATE COMM 2 PUSH-TO-TALK SW	6.00	
1B 17	COMM VIA VHF-2	6.00	

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P890046	FOR TWO NINER ZERO, OVER]	2.30	
1B 19	MON VHF-2 COMM AUDIO	7.00	
1P890047	MON RADIO COMM - [NASA S15, ATLANTA CENTER, ROGER. SQUAWK IDENT. REPORT LEAVING FLIGHT LEVEL TWO EIGHT ZERO, OVER]	3.70	
1P090048	PRESS ATC IDENT SW RADIO COMM -[NASA S15, ROGER. REPORT FLIGHT LEVEL TWO EIGHT ZERO.]	3.30	
1N 07	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	2.14	
1P090049	COMM VIA VHF-2 ENGINE INSTRUMENT SCAN	4.00	
1B 25	MON ENG NO 1 EPR IND	4.00	
1B 17	MON ENG NO 2 EPR IND	4.00	
030007	MON NO 2 ENG N1 IND	0.44	
7F 25	MON NO 1 ENG N1 IND	0.44	
7F 30	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 22	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 21	MON NO 2 ENG N2 IND	0.44	
7F 32	MON NO 1 ENG N2 IND	0.44	
7F 31	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 24	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 23	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 34	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 33	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 09	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 18	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 10	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
7F 19		0.44	
7F 11		0.44	
7F 20		0.44	
			0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONOS
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I


0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 18	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
00EV09	C/P EXT VIS SCAN		▽

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
8A 12	CRHMBR EXTERNAL VISION SCAN	45.00	□
090031	CLIMB THRU 28000 FT. REPORT TO ATC.		▽
3H 02	MON CORR BARO ALT INDIC	2.37	I
1P090050	RADIO COMM -[ATLANTA CENTER, NASA 515 LEAVING FLIGHT LEVEL TWO EIGHT ZERO, OVER]	4.00	I
1B 25	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	4.00	I
1B 17	COMM VIA VHF-2	4.00	I
1B 20	MON VHF-2 COMM AUDIO	5.00	I
1P090051	MON RADIO COMM -[NASA 515, ROGER, CLIMB AND MAINTAIN FLIGHT LEVEL TWO NINER ZERO, OVER]	3.50	I
1P090052	RADIO COMM -[NASA 515, ROGER, MAINTAIN FLIGHT LEVEL TWO NINER ZERO.]	1.50	I
1P090053	RADIO COMM -[NASA 515, ROGER, MAINTAIN FLIGHT LEVEL TWO NINER ZERO.]	4.00	I
1B 25	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	4.00	I
1B 17	COMM VIA VHF-2	4.00	I
140023	REPORT 1000 FT TO LEVEL OFF		▽
3H 02	MON CORR BARO ALT INDIC	2.13	I
1P140045	CALL OUT -[1000 FEET TO LEVEL OFF]	1.70	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE		EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F	18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F	11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F	12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
7F	20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
090033		TUNE AND MONITOR SPARTANBURG VOR -115.7		▽
00	06	RETRIEVE CHARTS APPROACH PLATES	6.00	I
00090002		REVIEW CHARTS TO DETERMINE SPARTAN- BURG VOR FREQ	5.00	I
5V	02	SET NAV-2 FREQ - WHOLE NO.5	2.93	I
5V	01	MON NAV-2 FREQ INDIC	4.91	I
5V	03	SET NAV-2 FREQ - FRACTIONS	1.98	I
5V	11	SET COMM 2 FILTER SEL SW TO RANGE	2.09	I
5V	12	SET COMM 2 NAV-2 NAV RECVR SW TO ON	1.40	I
5H	03	MON VOR POINTER NO.2 ON VOR/RM1 2 INDIC	2.27	I
1P090065		CALL OUT - [SPARTANBURG VOR ON NAV 2]	2.50	I
00EV15		C/P EXT VIS SCAN		▽
00A	13	CRWMBR EXTERNAL VISION SCAN	300.00	
030007		ENGINE INSTRUMENT SCAN		▽
7F	25	MON ENG NO 1 EPR IND	0.44	I
7F	30	MON ENG NO 2 EPR IND	0.44	I
7F	22	MON NO 2 ENG N1 IND	0.44	I
7F	21	MON NO 1 ENG N1 IND	0.44	I

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
			0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
			0. 500. 1000. 1500. 2000. 2500. 3000.

CODE		EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F	32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F	23	MON NO 1 ENG N2 IND	0.44	
7F	24	MON NO 2 ENG N2 IND	0.44	
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F	18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F	11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F	12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
7F	20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
030007		ENGINE INSTRUMENT SCAN		▽
7F	25	MON ENG NO 1 EPR IND	0.44	
7F	30	MON ENG NO 2 EPR IND	0.44	
7F	22	MON NO 2 ENG N1 IND	0.44	
7F	21	MON NO 1 ENG N1 IND	0.44	
7F	32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F	24	MON NO 2 ENG N2 IND	0.44	
7F	23	MON NO 1 ENG N2 IND	0.44	
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F	18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44	
			0.	500.
			1000.	1500.
			2000.	2500.
			3000.	

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
00EV05	C/P EXT VIS SCAN		▽
00EV05	C/P EXT VIS SCAN		▽
0A 11	CRWMBR EXTERNAL VISION SCAN	25.00	0
0A 11	CRWMBR EXTERNAL VISION SCAN	25.00	0
090040	TUNE TO GORDONVILLE VOR -115.6		▽
00 06	RETRIEVE CHARTS APPROACH PLATES	6.00	I
00090003	REVIEW CHARTS TO DETERMINE GORDONS- VILLE VOR FREQ	5.00	I
5U 01	MON NAV-1 FREQ INDIC	5.00	I
5U 02	SET NAV-1 FREQ - WHOLE NO. S	3.00	I
5U 03	SET NAV-1 FREQ - FRACTIONS	2.00	I
5U 11	SET COMM 2 FILTER SEL SW TO RANGE	2.00	I
5U 12	SET COMM 2 NAV-1 NAV RCVR SW TO ON	2.44	I
1P090066	CALL OUT - [GORDONSVILL VOR ON NAV 1]	2.50	I
5H 02	MON VOR POINTER NO.1 ON VOR/AMI 2 INDIC	2.27	I
030007	ENGINE INSTRUMENT SCAN		▽
00EV12	C/P EXT VIS SCAN		▽
0A 12	CRWMBR EXTERNAL VISION SCAN	60.00	□
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
			0. 500. 1000. 1500. 2000. 2500. 3000.

CODE		EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F	23	MON NO 1 ENG N2 IND	0.44	
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F	18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F	11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F	20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
7F	12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	
030007		ENGINE INSTRUMENT SCAN		▽
00EV03		C/P EXT VIS SCAN		▽
7F	30	MON ENG NO 2 EPR IND	0.44	
0A	10	CRWMBR EXTERNAL VISION SCAN	15.00	0
7F	25	MON ENG NO 1 EPR IND	0.44	
7F	22	MON NO 2 ENG N1 IND	0.44	
7F	21	MON NO 1 ENG N1 IND	0.44	
7F	32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F	24	MON NO 2 ENG N2 IND	0.44	
7F	23	MON NO 1 ENG N2 IND	0.44	
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F	18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44	

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
7F 12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	
00EV15	C/P EXT VIS SCAN		▽
0A 13	CRWMBR EXTERNAL VISION SCAN	300.00	▬
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE		EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS	
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44		
7F	24	MON NO 2 ENG N2 IND	0.44		
7F	23	MON NO 1 ENG N2 IND	0.44		
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44		
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44		
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44		
7F	10	MON NO 2 ENG OIL TEMP INDIC	0.44		
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44		
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44		
7F	11	MON NO 1 ENG OIL QTY INDIC	0.44		
7F	20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44		
7F	12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44		
090042		TURN COMPLETE - ON HDG 047.			▽
090043		RECEIVE CLEARANCE TO CLIMB TO 33000 FT			▽
1B	19	MON VHF-2 COMM AUDIO	7.00		
1P090054		MON RADIO COMM - [NASA 515, CLIMB AND MAINTAIN FLIGHT LVL THREE THREE ZERO.	3.50		
1P090055		CONTACT CENTER ON ONE THREE FOUR POINT FIVE FIVE, OVER]	3.50		
1P090056		RADIO COMM -[NASA 515, ROGER, MAINTAIN FLIGHT LEVEL THREE THREE ZERO, CENTER	4.00		
1B	25	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	6.00		
1B	17	COMM VIA VHF-2	6.00		
1P090057		ON ONE THREE FOUR POINT FIVE FIVE.]	2.00		
1B	02	SET VHF-2L FREQ- WHOLE NO.5	2.90		
1B	01	MON VHF-2L FREQ IND	4.88		

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1B 03	SET VHF-2L FREQ - FRACTIONS	1.98	I
1B 05	SET VHF-2 COMM TFR SW TO LEFT	1.45	I
1P090058	RADIO COMM -[ATLANTA CENTER, NASA 515 LEAVING FLIGHT LEVEL TWO NINER ZERO FOR	4.00	I
1B 25	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	6.00	I
1B 17	COMM VIA VHF-2	6.00	I
1P090059	FLIGHT LEVEL THREE THREE ZERO, OVER]	2.00	I
1P090060	MON RADIO COMM - [NASA 515, ATLANTA CENTER, ROGER. SQUAWK IDENT	3.50	I
1B 18	MON VHF-2 COMM AUDIO	3.50	I
1N 07	PRESS ATC IDENT SW	2.14	I
1P090061	MON RADIO COMM - [NASA 515, RADAR CONTACT. REPORT LEVEL AT FLIGHT	3.50	I
1B 20	MON VHF-2 COMM AUDIO	5.50	I
1P090062	LEVEL THREE THREE ZERO, OVER]	2.00	I
1P090002	RADIO COMM -[NASA 515, ROGER]	1.70	I
1B 14	ACT PUSH-TO-TALK SW ON HANDGRIP	1.70	I
1B 15	COMM VIA VHF-2	1.70	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I

0. 500. 1000. 1500. 2000. 2500. 3000.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
090045	CLIMB THRU 32000 FT. BEGIN 500 FT/MIN RATE OF CLIMB.		▽
3H 02	MON CORR BARO ALT INDIC	0.60	
1P090067	CALL OUT - (ONE THOUSAND FEET TO LEVEL OF)	1.70	
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
			0. 500. 1000. 1500. 2000. 2500. 3000.

CODE		EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS	
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44		I
7F	12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44		I
7F	20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44		I
00EV03		C/P EXT VIS SCAN			▽
8A	10	CRWMBR EXTERNAL VISION SCAN	15.00		0
00EV01		C/P EXT VIS SCAN			▽
8A	10	CRWMBR EXTERNAL VISION SCAN	5.00		I
				0.	500.
				1000.	1500.
				2000.	2500.
				3000.	

UNSHIFTED

MISSION TIMELINE
 MISSION - MSN11N FLT PHASE3
 MANUAL CONTROL
 CONFIGURATION - NASA 515 - FFD
 FLIGHT PHASE - CRUISE - NORMAL RWY

NOVEM 1978

CREWMEMBER - COPILOT

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
110002	REPORT REACHING 33000 FT.		▽
00EV17	C/P EXT VIS SCAN		▽
1B 25	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	4.20	
1B 32	COMM VIA VHF-2	4.20	
1P110001	RADIO COMM - ATLANTA CENTER, THIS IS NASA 515 LEVEL AT FLIGHT LEVEL THREE THREE	4.00	
0A 14	CRWMBR - EXTERNAL VISION SCAN	500.00	
1P110002	ZERO, OVER]	0.20	
1P110003	MON RADIO COMM - [NASA 515, ROGER]	1.70	
1B 20	MON VHF-2 COMM AUDIO	1.70	
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	

1700. 1900. 2100. 2300. 2500. 2700. 2900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 1 30	MON ENG NO 2 EPR IND	0.44	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
			1700. 1900. 2100. 2300. 2500. 2700. 2900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 10	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 10	MON NO 2 ENG OIL TEMP INDIC	0.44	I

1700. 1900. 2100. 2300. 2500. 2700. 2900.

CODE		EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F	11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F	12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
7F	20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
030007		ENGINE INSTRUMENT SCAN		▽
7F	25	MON ENG NO 1 EPR IND	0.44	I
7F	30	MON ENG NO 2 EPR IND	0.44	I
7F	22	MON NO 2 ENG N1 IND	0.44	I
7F	21	MON NO 1 ENG N1 IND	0.44	I
7F	32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F	24	MON NO 2 ENG N2 IND	0.44	I
7F	23	MON NO 1 ENG N2 IND	0.44	I
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F	18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F	11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F	20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F	12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
030007		ENGINE INSTRUMENT SCAN		▽
7F	30	MON ENG NO 2 EPR IND	0.44	I
7F	25	MON ENG NO 1 EPR IND	0.44	I
7F	21	MON NO 1 ENG N1 IND	0.44	I
7F	22	MON NO 2 ENG N1 IND	0.44	I
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I

1700. 1900. 2100. 2300. 2500. 2700. 2900.

CODE		EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F	32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F	23	MON NO 1 ENG N2 IND	0.44	I
7F	24	MON NO 2 ENG N2 IND	0.44	I
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F	10	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F	11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F	12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	I
7F	20	MON NO 2 ENG VIBRATION AMPLITUDE INDIC	0.44	I
	110004	PILOT REQUESTS RETURN TO ATLANTA; CONTROLLER COORDINATES WITH ADJACENT SECTORS FOR RETURN VECTORS.		▽
	1P110004	RADIO COMM - ATLANTA CENTER, THIS IS NASA 515. REQUEST VECTORS FOR RETURN TO	4.00	I
1B	25	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	5.00	I
1B	17	COMM VIA VHF-2 ATLANTA, OVER]	5.00	I
1P110005		MON VHF-2 COMM AUDIO	1.00	I
1B	20	MON RADIO COMM - [NASA 515, ROGER.	3.00	I
	1P110006	STANDBY FOR INSTRUCTIONS]	3.00	I
	030007	ENGINE INSTRUMENT SCAN		▽
7F	30	MON ENG NO 2 EPR IND	0.44	I
7F	25	MON ENG NO 1 EPR IND	0.44	I
7F	21	MON NO 1 ENG N1 IND	0.44	I
7F	22	MON NO 2 ENG N1 IND	0.44	I

1700. 1900. 2100. 2300. 2500. 2700. 2900.

CODE		EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F	32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F	23	MON NO 1 ENG N2 IND	0.44	I
7F	24	MON NO 2 ENG N2 IND	0.44	I
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F	10	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F	11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F	12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
7F	20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
030007		ENGINE INSTRUMENT SCAN		▽
7F	25	MON ENG NO 1 EPR IND	0.44	I
7F	30	MON ENG NO 2 EPR IND	0.44	I
7F	22	MON NO 2 ENG N1 IND	0.44	I
7F	21	MON NO 1 ENG N1 IND	0.44	I
7F	32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F	24	MON NO 2 ENG N2 IND	0.44	I
7F	23	MON NO 1 ENG N2 IND	0.44	I
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F	10	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44	I

1700. 1900. 2100. 2300. 2500. 2700. 2900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
00EV12	C/P EXT VIS SCAN		▽
8A 12	CRWMBR EXTERNAL VISION SCAN	60.00	▢
090007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
110005	RECEIVE VECTORS FOR THE LANIER SIX STAR, PULASKI TRANSITION		▽

1700. 1900. 2100. 2300. 2500. 2700. 2900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P110007	NON RADIO COMM - [NASA S15, FOR VECTOR TO INTERCEPT LANIER SIX ARRIVAL.	3.66	I
1B 36	MONITOR VHF-2 COMM AUDIO	11.00	0
1P110008	PULASKI TRANSITION. TURN LGFT HEADING TWO SEVEN ZERO. CONTACT ATLANTA CENTER ON ONE THREE FIVE POINT THREE FIVE, OVER]	4.00	I
1P110009	RADIO COMM - [S15, ROGER. LEFT HEADING TWO SEVEN ZERO. LANIER SIX ARRIVAL. ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	2.44	I
1P110010	COMM VIA VHF-2 CENTER ONE THREE FIVE POINT THREE FIVE.]	4.00	I
1B 26	TUNE BADIN ULTRA HIGH SECTOR -135.35	7.00	0
1B 17	MON VHF-2R FREQ IND	7.00	0
1P110011	SET VHF-2R FREQ - WHOLE NO.S	3.00	I
110007	SET VHF-2R FREQ - FRACTIONS		V
1B 07	SET VHF-2 COMM TFR SW TO RIGHT	4.86	I
1B 08	ACTUATE COMM 2 PUSH-TO-TALK SW	2.00	I
1B 09	COMM VIA VHF-2	1.98	I
1B 06	RADIO COMM - [ATLANTA CENTER, THIS IS NASA S15 LEVEL AT THREE THREE ZERO TURNING TO TWO SEVEN ZERO, OVER]	1.45	I
1B 28	MON RADIO COMM - [NASA S15, ROGER. SQUAWK IDENT]	5.00	I
1B 17	MONITOR VHF-2 COMM AUDIO	7.00	0
1P110012	PRESS ATC IDENT SW	3.50	I
1P110013		1.50	I
1P110014		2.50	I
1B 36		2.00	I
1N 07		2.14	I

1700. 1900. 2100. 2300. 2500. 2700. 2900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P110015	MON RADIO COMM- (NASA 515, RADAR CONTACT)	2.00	I
1B 36	MONITOR VHF-2 COMM AUDIO	2.00	I
110000	SET NAV-1 TO PULASKI VOR		▽
0B 06	RETRIEVE CHARTS APPROACH PLATES	6.00	0
0B110001	REVIEW CHARTS TO DETERMINE PULASKI VOR FREQ	5.00	I
5U 01	MON NAV-1 FREQ INDIC	5.00	0
5U 02	SET NAV-1 FREQ - WHOLE NO.5	3.00	I
5U 03	SET NAV-1 FREQ - FRACTIONS	2.00	I
1P110020	CALL OUT - (PULASKI VOR ON NAV 1)	2.50	I
5H 02	MON VOR POINTER NO.1 ON VOR/RMI 2 INDIC	2.27	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I

1700. 1900. 2100. 2300. 2500. 2700. 2900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	I
00EV14	C/P EXT VIS SCAN		▽
0A 13	CRWMBR EXTERNAL VISION SCAN	200.00	▬
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I

1700. 1800. 2100. 2300. 2500. 2700. 2900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 10	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
110009	TURN COMPLETE - ON HOG 270		
030007	ENGINE INSTRUMENT SCAN		
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 10	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
			1700. 1900. 2100. 2300. 2500. 2700. 2900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
110010	RECEIVE INSTRUCTIONS TO DESCEND TO 31000 FT		▽
1B 19	MON VHF-2 COMM AUDIO	7.00	0
1P110016	MON RADIO COMM - [NASA S15, DESCEND AND MAINTAIN FLIGHT LEVEL THREE ONE ZERO CONTACT CENTER ON ONE THREE TWO POINT SEVEN FIVE, OVER]	3.50	I
1P110017	RADIO COMM -[NASA S15, ROGER, MAINTAIN FLIGHT LEVEL THREE ONE ZERO, CENTER ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP COMM VIA VHF-2 ONE THREE TWO POINT SEVEN FIVE.	4.00	I
1B 25		6.00	0
1B 17		6.00	0
1P110019		2.00	I

1700. 1900. 2100. 2300. 2500. 2700. 2900.

UNSHIFTED

MISSION TIMELINE
 MISSION - MSN11N FLT PHASES
 MANUAL CONTROL
 CONFIGURATION - NASA 515 - FFD
 FLIGHT PHASE - DESCENT - FFD
 CREWMEMBER - COPILOT

NOVEM 1978

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
140002	BEGIN DESCENT TO 31000FT		
00EV15	C/P EXT VIS SCAN		
140001	CONTACT PULASKI HIGH SECTOR -132.75		
0A 13	CRWMBR EXTERNAL VISION SCAN	300.00	
1B 01	MON VHF-2L FREQ IND	4.00	
1B 02	SET VHF-2L FREQ - WHOLE NO.3	2.90	
1B 03	SET VHF-2L FREQ - FRACTIONS	1.90	
1B 04	ADJ VHF-2 VOLUME	2.00	
1B 20	ACTUATE COMM 2 PUSH-TO-TALK SW	6.00	
1B 17	COMM VIA VHF-2	6.00	
1P140001	RADIO COMM -[ATLANTA CENTER, THIS IS NASA 515 LEAVING FLIGHT LEVEL THREE THREE	4.00	
1P140002	ZERO FOR FLIGHT LVL THREE ONE ZERO, OVER	2.00	
1P140003	NON RADIO COMM - [NASA 515, ATLANTA CENTER, ROGER. SQUAWK IDENT]	3.00	
1B 20	MON VHF-2 COMM AUDIO	3.00	
1B 06	MON IDENT CODE INDIC	0.77	
1P140004	MON RADIO COMM - [NASA 515, RADAR CONTACT]	2.00	
1B 36	MONITOR VHF-2 COMM AUDIO	2.00	
030007	ENGINE INSTRUMENT SCAN		
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 25	MON ENG NO 1 EPR IND	0.44	

2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE		EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F	21	MON NO 1 ENG N1 IND	0.44	I
7F	22	MON NO 2 ENG N1 IND	0.44	I
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F	32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F	23	MON NO 1 ENG N2 IND	0.44	I
7F	24	MON NO 2 ENG N2 IND	0.44	I
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F	18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F	11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F	12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
7F	20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
030007 ENGINE INSTRUMENT SCAN				▽
7F	25	MON ENG NO 1 EPR IND	0.44	I
7F	30	MON ENG NO 2 EPR IND	0.44	I
7F	22	MON NO 2 ENG N1 IND	0.44	I
7F	21	MON NO 1 ENG N1 IND	0.44	I
7F	32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F	24	MON NO 2 ENG N2 IND	0.44	I
7F	23	MON NO 1 ENG N2 IND	0.44	I
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F	18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
			2600.	3100.
			3600.	4100.
			4600.	5100.
			5600.	

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	I
140004	LEVEL OFF AT 31000 FT		▽
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	I
140005	RECEIVE VECTOR TO INTERCEPT PULASKI 225 RADIAL		▽
			2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P140005	MON RADIO COMM - [NASA 515, FOR VEC- TOR TO INTERCEPT PULASKI TWO TWO FIVE MONITOR VHF-2 COMM AUDIO	3.27	I
1B 36	RADIAL, TURN LEFT HEADING TWO FOUR ZERO, CLEARED TO THE ATLANTA INTERNA- TIONAL AIRPORT VIA THE LANIER SIX AR- RIVAL, PULASKI TRAN- SITION, OVER]	12.00	I
1P140006	RADIO COMM -[515, ROGER, LEFT HEADING TWO FOUR ZERO FOR PULASKI TWO TWO FIVE ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP COMM VIA VHF-2	4.36	I
1P140007	RADIAL, LANIER SIX ARRIVAL.]	4.36	I
1P140008	TURN TO HDG 240 ENGINE INSTRUMENT SCAN	4.00	I
1B 25	MON ENG NO 2 EPR IND	6.00	I
1B 17	MON ENG NO 1 EPR IND	6.00	I
1P140009	MON NO 1 ENG N1 IND	2.00	I
140006	MON NO 2 ENG N1 IND		I
030007	MON NO 2 ENG N1 IND		I
7F 30	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 25	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 21	MON NO 1 ENG N2 IND	0.44	I
7F 22	MON NO 2 ENG N2 IND	0.44	I
7F 31	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 32	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 23	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 24	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 33	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 34	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 09			
7F 10			
7F 10			

2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
140008	TURN COMPLETE - ON HDG 240		▽
00EV12	C/P EXT VIS SCAN		▽ □
0A 12	CRWMOR EXTERNAL VISION SCAN	00.00	▽ □
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
			2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
140009	BEGIN TURN TO PULAS- KI 225 RADIAL		▽
00EV04	C/P EXT VIS SCAN		▽
0A 10	CRWMBR EXTERNAL VISION SCAN	20.00	0
140010	TURN COMPLETE - ON HOG 225		▽
140011	SET NAV-2 TO TOCCOA VOR -109.8		▽
00 06	RETRIEVE CHARTS APPROACH PLATES	6.00	I
00140001	REVIEW CHARTS TO DETERMINE TOCCOA VOR FREQ	5.00	I
5V 01	MON NAV-2 FREQ INDIC	4.91	I
5V 02	SET NAV-2 FREQ - WHOLE NO.S	2.93	I
5V 03	SET NAV-2 FREQ - FRACTIONS	1.98	I
1P140042	CALL OUT -[TOCCOA VOR ON NAV 2]	2.90	I
			2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P 13	MON VERBAL REPORT	2.30	
5H 03	MON VOR POINTER NO.2	2.27	
030007	ON VOR/RMI 2 INDIC ENGINE INSTRUMENT SCAN		▽
00EY17	C/P EXT VIS SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 30	MON ENG NO 2 EPR IND	0.44	
0A 14	CRWMBR EXTERNAL VISION SCAN	500.00	▬
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
			2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
140012	HANDOFF TO LANIER HIGH SECTOR		▽
1P140010	MON RADIO COMM - [NASA 515, CONTACT CENTER ON ONE THREE TWO POINT EIGHT, OVER]	3.50	I
1B 18	MON VHF-2 COMM AUDIO	3.50	I
1B 16	COMM VIA VHF-2	3.50	I
1P140011	RADIO COMM -[NASA 515, ROGER, ONE THREE TWO POINT EIGHT.]	3.50	I
1B 24	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	3.50	I
1B 07	MON VHF-2R FREQ IND	4.00	I
1B 08	SET VHF-2R FREQ - WHOLE NO.5	2.00	I
1B 09	SET VHF-2R FREQ - FRACTIONS	1.90	I
1B 06	SET VHF-2 COMM TFR SW TO RIGHT	1.45	I
1B 17	COMM VIA VHF-2	4.00	I
1P140012	RADIO COMM -[ATLANTA CENTER, NASA 515 LEVEL AT FLIGHT LVL THREE ONE ZERO, OVER]	4.00	I
1B 28	ACTUATE COMM 2 PUSH- TO-TALK SW	4.00	I
		2600.	3100.
		3600.	4100.
		4600.	5100.
		5600.	

CODE		EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS	
1B	20	MON VHF-2 COMM AUDIO	3.00		
1P140013		MON RADIO COMM - [NASA 515, ATLANTA CENTER, ROGER. SQUAWK IDENT]	3.00		
1N	07	PRESS ATC IDENT SW	2.14		
1B	36	MONITOR VHF-2 COMM AUDIO	2.00		
1P140014		MON RADIO COMM- [NASA 515, RADAR CONTACT]	2.00		
030007		ENGINE INSTRUMENT SCAN		▽	
7F	25	MON ENG NO 1 EPR IND	0.44		
7F	30	MON ENG NO 2 EPR IND	0.44		
7F	22	MON NO 2 ENG N1 IND	0.44		
7F	21	MON NO 1 ENG N1 IND	0.44		
7F	32	MON ENG NO 2 EXH GAS TEMP IND	0.44		
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44		
7F	24	MON NO 2 ENG N2 IND	0.44		
7F	23	MON NO 1 ENG N2 IND	0.44		
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44		
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44		
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44		
7F	18	MON NO 2 ENG OIL TEMP INDIC	0.44		
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44		
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44		
7F	11	MON NO 1 ENG OIL QTY INDIC	0.44		
7F	20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44		
7F	12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44		
030007		ENGINE INSTRUMENT SCAN		▽	
7F	30	MON ENG NO 2 EPR IND	0.44		
7F	25	MON ENG NO 1 EPR IND	0.44		
7F	21	MON NO 1 ENG N1 IND	0.44		
7F	22	MON NO 2 ENG N1 IND	0.44		
			2600.	3100.	3600.
			4100.	4600.	5100.
			5600.		

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 10	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 10	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I

2600.

3100.

3600.

4100.

4600.

5100.

5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
140013	RECEIVE INSTRUCTIONS TO DESCEND TO 24000 FT		▽
1P140015	MON RADIO COMM - [NASA 515, DESCEND AND MAINTAIN FLIGHT LEVEL TWO FOUR ZERO.	3.90	I
1B 36	MONITOR VHF-2 COMM AUDIO	6.50	I
1P140016	REPORT LEAVING FLT LEVEL TWO SIX ZERO, OVER]	2.60	I
1P140017	RADIO COMM -[515, ROGER, MAINTAIN FLT LEVEL TWO FOUR ZERO. REPORT FLIGHT LEVEL	4.00	I
1B 25	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	5.00	I
1B 17 140014	COMM VIA VHF-2 BEGIN MACH 0.75 DESCENT	5.00	I ▽
1P140018 030007	TWO SIX ZERO] ENGINE INSTRUMENT SCAN	1.00	I ▽
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I

2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	I
			2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE		EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS	
7F	25	MON ENG NO 1 EPR IND	0.44		
7F	21	MON NO 1 ENG N1 IND	0.44		
7F	22	MON NO 2 ENG N1 IND	0.44		
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44		
7F	32	MON ENG NO 2 EXH GAS TEMP IND	0.44		
7F	23	MON NO 1 ENG N2 IND	0.44		
7F	24	MON NO 2 ENG N2 IND	0.44		
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44		
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44		
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44		
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44		
7F	18	MON NO 2 ENG OIL TEMP INDIC	0.44		
7F	11	MON NO 1 ENG OIL QTY INDIC	0.44		
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44		
7F	12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44		
7F	20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44		
030007		ENGINE INSTRUMENT SCAN		▽	
7F	25	MON ENG NO 1 EPR IND	0.44		
7F	30	MON ENG NO 2 EPR IND	0.44		
7F	22	MON NO 2 ENG N1 IND	0.44		
7F	21	MON NO 1 ENG N1 IND	0.44		
7F	32	MON ENG NO 2 EXH GAS TEMP IND	0.44		
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44		
7F	24	MON NO 2 ENG N2 IND	0.44		
7F	23	MON NO 1 ENG N2 IND	0.44		
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44		
7F	93	MON ENG NO 1 FUEL FLOW INDIC	0.44		
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44		
7F	18	MON NO 2 ENG OIL TEMP INDIC	0.44		
				2600.	3100.
				3600.	4100.
				4600.	5100.
				5600.	

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
2600.			3100.
			3600.
			4100.
			4600.
			5100.
			5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
			2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	I
7F 20	MON NO 2 ENG VIBRATION AMPLITUDE INDIC	0.44	I
140015	REACH 26000 FT		▽
140016	RECEIVE CLEARANCE TO DESCEND TO 11000 FT.		▽
3H 02	MON CORR BARO ALT INDIC	0.60	I
1B 25	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	4.00	I
1B 17	COMM VIA VHF-2	4.00	I
1P140019	RADIO COMM -[ATLANTA CENTER, NASA 515 LEAVING FLIGHT LEVEL TWO SIX ZERO, OVER]	4.00	I
1B 19	MON VHF-2 COMM AUDIO	6.20	I
1P140020	MON RADIO COMM -[NASA 515, DESCEND AND MAINTAIN ONE ONE THOUSAND, CONTACT CENTER ON ONE TWO FIVE POINT TWO, OVER]	3.75	I
1P140021	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	2.50	I
1B 25	COMM VIA VHF-2	6.00	I
1B 17	RADIO COMM -[NASA 515, ROGER, MAINTAIN ONE ONE THOUSAND, CENTER ONE TWO FIVE POINT TWO.]	4.00	I
1P140023	TUNE NORCROSS LOW SECTOR -125.2	1.00	I
140017	MON VHF-2L FREQ IND		▽
1B 01	SET VHF-2L FREQ - WHOLE NO.5	4.00	I
1B 02	SET VHF-2L FREQ - FRACTIONS	2.90	I
1B 03	SET VHF-2L FREQ - SW TO LEFT	1.90	I
1B 05	COMM VIA VHF-2	1.45	I
1B 17	COMM VIA VHF-2	6.00	I

2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P140024	RADIO COMM -[ATLANTA CENTER, THIS IS NASA 515 LEAVING FLIGHT	4.00	I
1B 20	LEVEL TWO FIVE ZERO ACTUATE COMM 2 PUSH-TO-TALK SW	6.00	I
1P140025	FOR ONE ONE THOUSAND, OVER]	2.00	I
1P140026	MON RADIO COMM - [NASA 515, ATLANTA CENTER, ROGER.	3.50	I
1B 10	SQUAWK IDENT, ALTI-	6.00	I
1P140027	MON VHF-2 COMM AUDIO METER TWO NINER	2.50	I
140010	POINT EIGHT EIGHT] SET ALTIMETER BARO SETTING TO 29.80		▽
1P140043	CALL OUT -[ALTIMETER SETTING IS TWO NINER POINT EIGHT]	2.40	I
1N 07	PRESS ATC IDENT SW	2.14	I
140032	ALTIMETER BARO SET PROC.		▽
3H 04	MONITOR ALTIMETER BARO SETTING INDIC	2.65	I
3H 03	SET ALTIMETER BARO SETTING CONTROL	2.65	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I

2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
			2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE		EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F	32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F	23	MON NO 1 ENG N2 IND	0.44	
7F	24	MON NO 2 ENG N2 IND	0.44	
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F	10	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F	11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F	12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
7F	20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
030007		ENGINE INSTRUMENT SCAN		▽
7F	25	MON ENG NO 1 EPR IND	0.44	
7F	30	MON ENG NO 2 EPR IND	0.44	
7F	22	MON NO 2 ENG N1 IND	0.44	
7F	21	MON NO 1 ENG N1 IND	0.44	
7F	32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F	24	MON NO 2 ENG N2 IND	0.44	
7F	23	MON NO 1 ENG N2 IND	0.44	
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F	10	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44	
			2600.	3100.
			3600.	4100.
			4600.	5100.
			5600.	

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
030007	ENGINE INSTRUMENT SCAN		▽
00EV03	C/P EXT VIS SCAN		▽
00EV03	C/P EXT VIS SCAN		▽
0A 10	CRWMBR EXTERNAL VISION SCAN	15.00	
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 30	MON ENG NO 2 EPR IND	0.44	
0A 10	CRWMBR EXTERNAL VISION SCAN	15.00	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
140019	CROSS TOCCOA VOR		▽
140020	TUNE NORCROSS VOR -116.6		▽
			2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
BB 06	RETRIEVE CHARTS	6.00	I
BB140002	APPROACH PLATES	5.00	I
140022	REVIEW CHARTS TO DETERMINE NORCROSS VOR FREQ		▽
140023	REACH 17000 FT. BEGIN 500 FT/MIN RATE OF DESCENT REPORT 1000 FT TO LEVEL OFF		▽
3H 02	MON CORR BARO ALT INDIC	2.13	I
1P140045	CALL OUT -[1000 FEET TO LEVEL OFF]	1.70	I
SU 01	MON NAV-1 FREQ INDIC	5.00	I
SU 02	SET NAV-1 FREQ - WHOLE NO. 5	3.00	I
SU 03	SET NAV-1 FREQ - FRACTIONS	2.00	I
1P140044	CALL OUT -[NORCROSS VOR ON NAV 1]	2.30	I
00EV10	C/P EXT VIS SCAN		▽
8A 14	CRWMBR EXTERNAL VISION SCAN	1000.00	
5H 02	MON VOR POINTER NO.1 ON VOR/RMI 2 INDIC	2.27	I
140021	RECEIVE INSTRUCTIONS TO GO INTO A HOLDING PATTERN AT LANIER INTERSECTION		▽
1P140028	MON RADIO COMM - [NASA 515, MAINTAIN ONE FIVE THOUSAND. CLEARANCE LIMIT IS	4.00	I
1B 37	MONITOR VHF-2 COMM	16.00	I
1P140029	NOW LANIER INTERSECTION. HOLD NORTHWEST OF FIX ON NORCROSS ZERO FOUR ONE RADIAL	5.33	I
1P140030	ONE AND ONE-HALF MINUTE RIGHT TURNS. EXPECT FURTHER CLEARANCE AT ONE SEVEN ONE FIVE, OVER]	5.33	I
1P140031	COMM VIA VHF-2	1.33	I
1B 17		6.00	I

2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P140032	RADIO COMM - [515, ROGER. MAINTAIN ONE FIVE THOUSAND. HOLD NORTHWEST OF LANIER	4.50	
1B 25	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	6.00	
1P140033	INTERSECTION. RIGHT TURNS.]	1.50	
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
7F 12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	
140024	REACH 16000 FT. BEGIN DECELERATION TO 210 KIAS.		▽
140025	TUNE CHATTANOOGA VOR -115.8		▽
0B 07	STOW CHARTS	5.91	
0B140003	REVIEW CHARTS TO DETERMINE CHATTANOOGA VOR FREQ	5.00	

2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE		EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS	
5V	02	SET NAV-2 FREQ - WHOLE NO.5	2.93		
5V	01	MON NAV-2 FREQ INDIC	4.91		
5V	03	SET NAV-2 FREQ - FRACTIONS	1.98		
1P140046		CALL OUT -CHATA- NOOGA VOR ON NAV 21	2.30		
5H	03	MON VOR POINTER NO.2 ON VOR/RMI 2 INDIC	2.27		
030007		ENGINE INSTRUMENT SCAN			▽
7F	30	MON ENG NO 2 EPR IND	0.44		
7F	25	MON ENG NO 1 EPR IND	0.44		
7F	21	MON NO 1 ENG N1 IND	0.44		
7F	22	MON NO 2 ENG N1 IND	0.44		
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44		
7F	32	MON ENG NO 2 EXH GAS TEMP IND	0.44		
7F	23	MON NO 1 ENG N2 IND	0.44		
7F	24	MON NO 2 ENG N2 IND	0.44		
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44		
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44		
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44		
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44		
7F	18	MON NO 2 ENG OIL TEMP INDIC	0.44		
7F	11	MON NO 1 ENG OIL QTY INDIC	0.44		
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44		
7F	12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44		
7F	20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44		
030007		ENGINE INSTRUMENT SCAN			▽
7F	25	MON ENG NO 1 EPR IND	0.44		
7F	30	MON ENG NO 2 EPR IND	0.44		
7F	22	MON NO 2 ENG N1 IND	0.44		
7F	21	MON NO 1 ENG N1 IND	0.44		
7F	32	MON ENG NO 2 EXH GAS TEMP IND	0.44		
			2400.	3100.	3600.
				4100.	4600.
					5100.
					5600.

CODE		EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS											
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44												
7F	24	MON NO 2 ENG N2 IND	0.44												
7F	23	MON NO 1 ENG N2 IND	0.44												
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44												
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44												
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44												
7F	18	MON NO 2 ENG OIL TEMP INDIC	0.44												
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44												
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44												
7F	11	MON NO 1 ENG OIL QTY INDIC	0.44												
7F	20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44												
7F	12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44												
030007		ENGINE INSTRUMENT SCAN													▽
7F	30	MON ENG NO 2 EPR IND	0.44												
7F	25	MON ENG NO 1 EPR IND	0.44												
7F	21	MON NO 1 ENG N1 IND	0.44												
7F	22	MON NO 2 ENG N1 IND	0.44												
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44												
7F	32	MON ENG NO 2 EXH GAS TEMP IND	0.44												
7F	23	MON NO 1 ENG N2 IND	0.44												
7F	24	MON NO 2 ENG N2 IND	0.44												
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44												
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44												
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44												
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44												
7F	18	MON NO 2 ENG OIL TEMP INDIC	0.44												
7F	11	MON NO 1 ENG OIL QTY INDIC	0.44												
				2600.	3100.	3600.	4100.	4600.	5100.	5600.					

CODE		EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS	
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44		
7F	12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44		
7F	20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44		
030007		ENGINE INSTRUMENT SCAN			▽
7F	25	MON ENG NO 1 EPR IND	0.44		
7F	30	MON ENG NO 2 EPR IND	0.44		
7F	22	MON NO 2 ENG N1 IND	0.44		
7F	21	MON NO 1 ENG N1 IND	0.44		
7F	32	MON ENG NO 2 EXH GAS TEMP IND	0.44		
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44		
7F	24	MON NO 2 ENG N2 IND	0.44		
7F	23	MON NO 1 ENG N2 IND	0.44		
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44		
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44		
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44		
7F	18	MON NO 2 ENG OIL TEMP INDIC	0.44		
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44		
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44		
7F	11	MON NO 1 ENG OIL QTY INDIC	0.44		
7F	20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44		
7F	12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44		
030007		ENGINE INSTRUMENT SCAN			▽
7F	30	MON ENG NO 2 EPR IND	0.44		
7F	25	MON ENG NO 1 EPR IND	0.44		
7F	21	MON NO 1 ENG N1 IND	0.44		
7F	22	MON NO 2 ENG N1 IND	0.44		
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44		
7F	32	MON ENG NO 2 EXH GAS TEMP IND	0.44		
7F	23	MON NO 1 ENG N2 IND	0.44		
				2600.	3100.
				3600.	4100.
				4600.	5100.
				5600.	

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	
7F 20	MON NO 2 ENG VIBRATION AMPLITUDE INDIC	0.44	
140027	HOLDING PATTERN PROC -RIGHT TURNS -1 1/2 MIN. LEGS -1 LOOP -INITIATE FIRST TURN OVER INTERSECTION		▽
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
			2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
3N 03	START ELAPSED TIME INDIC	2.10	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
1P140047	CALL OUT -[THIRTY SECONDS]	0.80	I
3N 02	MONITOR CLOCK	2.10	I
1P140048	CALL OUT -[SIXTY SECONDS]	0.80	I
			2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
3N 02 030007	MONITOR CLOCK ENGINE INSTRUMENT SCAN	2.10	1 ▽
7F 90	MON ENG NO 2 EPR IND	0.44	
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
1P140049	CALL OUT -EIGHTY FIVE SECONDS	0.80	
3N 02	MONITOR CLOCK	2.10	
3N 04	RESET ELAPSED TIME INDIC	2.10	
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
2600. 3100. 3600. 4100. 4600. 5100. 5600.			

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
7F 12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	
00EV16 0A 13	C/P EXT VIS SCAN CRRMBR EXTERNAL VISION SCAN	400.00	▽
3N 03	START ELAPSED TIME INDIC	2.10	
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	

2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 19	MON NO 2 ENG OIL	0.44	I
7F 11	QTY INDIC	0.44	I
7F 20	MON NO 1 ENG OIL QTY	0.44	I
7F 12	INDIC	0.44	I
1P140047	MON NO 2 ENG VIBR	0.44	I
3N 02	AMPLITUDE INDIC	0.44	I
140028	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.00	I
1P140034	CALL OUT -[THIRTY SECONDS]	2.10	I
1B 36	MONITOR CLOCK	3.27	I
1P140035	RECEIVE CLEARANCE TO CONTINUE DESCENT AND APPROACH	12.00	I
1B 17	MON RADIO COMM - [NASA 515. CLEARED TO ATLANTA INTER- NATIONAL AIRPORT VIA MONITOR VHF-2 COMM AUDIO	4.36	I
1P140036	LAST ROUTING CLEARED . INCREASE SPEED TO TWO THREE ZERO KNOTS . DESCEND AND MAIN- TAIN ONE ONE THOU- SAND. EXPECT AN ILS RUNWAY ZERO EIGHT APPROACH. OVER]	4.36	I
1P140037	RADIO COMM -[515. ROGER. INCREASE SPD TWO THREE ZERO. MAINTAIN ONE ONE	4.50	I
1B 25	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	5.00	I
1B 17	COMM VIA VHF-2	5.00	I
140029	BEGIN DESCENT. SET THRUST FLIGHT IDLE	0.50	I
1P140038	THOUSAND]	0.50	I
030007	ENGINE INSTRUMENT SCAN	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I

2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
030007	ENGINE INSTRUMENT SCAN		
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
			2600.
			3100.
			3600.
			4100.
			4600.
			5100.
			5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
030007	ENGINE INSTRUMENT SCAN		
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
030007	ENGINE INSTRUMENT SCAN		
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
			2600. 3100. 3600. 4100. 4600. 5100. 5600.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
140023	REPORT 1000 FT TO LEVEL OFF		▽
3H 02	MON CORR BARO ALT INDIC	2.13	
1P140045	CALL OUT -[1000 FEET TO LEVEL OFF]	1.70	
160000	TURN ON LANDING LTS		▽
7G 17	SET LANDING LIGHTS SW TO ON	2.20	
140030	REACH 11000 FT AT 230 KIAS		▽
140031	HANDOFF TO ATLANTA APPROACH CONTROL		▽
1B 20	MON VHF-2 COMM AUDIO	5.00	
1P140039	MON RADIO COMM - [NASA S15, CONTACT APPROACH CONTROL ON ONE TWO SIX POINT NINER, OVER]	4.00	
1P140040 030007	ENGINE INSTRUMENT SCAN	1.00	▽
1P140041	RADIO COMM -[NASA S15, ROGER, APPROACH ON ONE TWO SIX POINT NINER]	4.00	
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 30	MON ENG NO 2 EPR IND	0.44	
		2600.	3100.
		3600.	4100.
		4600.	5100.
		5600.	

CODE		EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS	
1B	25	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	4.00		
1B	17	COMM VIA VHF-2	4.00		
7F	21	MON NO 1 ENG N1 IND	0.44		
7F	22	MON NO 2 ENG N1 IND	0.44		
7F	31	MON ENG NO 1 EXH GAS TEMP IND	0.44		
7F	32	MON ENG NO 2 EXH GAS TEMP IND	0.44		
7F	23	MON NO 1 ENG N2 IND	0.44		
7F	24	MON NO 2 ENG N2 IND	0.44		
7F	33	MON ENG NO 1 FUEL FLOW INDIC	0.44		
7F	34	MON ENG NO 2 FUEL FLOW INDIC	0.44		
7F	09	MON NO 1 ENG OIL PRESS INDIC	0.44		
7F	10	MON NO 1 ENG OIL TEMP INDIC	0.44		
7F	18	MON NO 2 ENG OIL TEMP INDIC	0.44		
7F	11	MON NO 1 ENG OIL QTY INDIC	0.44		
7F	19	MON NO 2 ENG OIL QTY INDIC	0.44		
7F	12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44		
7F	20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44		
			2600.	3100.	3600.
			4100.	4600.	5100.
				5600.	

UNSHIFTED

MISSION TIMELINE
 MISSION - MSN11N FLT PHASES
 MANUAL CONTROL
 CONFIGURATION - NASA 515 - FFD
 FLIGHT PHASE - APP AND LAND - FFD
 ILS PROCEDURAL
 CREWMEMBER - COPILOT

NOVEM 1978

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
160001	TUNE ATLANTA APPROACH CONTROL -126.9		
00EV02	C/P EXT VIS SCAN		
1B 07	MON VHF-2R FREQ IND	4.86	
1B 08	SET VHF-2R FREQ - WHOLE NO.5	2.88	
0A 10	CRWMBR EXTERNAL VISION SCAN	10.00	
1B 09	SET VHF-2R FREQ - FRACTIONS	1.98	
160002	TUNE ATIS -129.7		
1A 07	MON VHF-1R FREQ IND	4.96	
1A 08	SET VHF-1R FREQ. WHOLE NO.5	2.01	
1A 09	SET VHF-1R FREQ - FRACTIONS	1.98	
1A 06	SET VHF-1 COMM TFR	2.39	
1A 17	SW TO RIGHT SET COMM 2 VHF-1	1.52	
1P160001	COMM RECVR SW TO ON MON RADIO COMM - [INFORMATION LIMA ONE SEVEN ZERO FIVE OBSERVATION- TWO	3.42	
1A 15	MON VHF-1 COMM AUDIO	24.00	
00EV00	C/P EXT VIS SCAN		
0A 11	CRWMBR EXTERNAL VISION SCAN	40.00	
1P160002	FIVE HUNDRED SCAT- TERED CEILING FOUR THOUSAND BROKEN.	4.56	
1P160003	VISIBILITY ONE SIX. TEMPERATURE FIVE NINER. WIND ONE ONE ZERO DEGREES AT TEN GUSTING TO ONE SEVEN	4.56	

4900. 5400. 5900. 6400. 6900. 7400. 7900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P160004	. ALTIMETER TWO - NINER EIGHT FOUR. SIMULTANEOUS PARALLEL APPROACHES IN OPERATION ON RUNWAYS ZERO EIGHT AND NINER RIGHT. ADVISE CONTROLLER ON INITIAL CONTACT YOU HAVE INFORMATION LIMA.]	4.56	I
1P160005	SET ALTIMETER BARO SETTING TO 29.84	4.56	I
1P160006	CALL OUT-[DESCENT AND APPROACH CHECK-LIST]	2.28	I
160003	ALTITUDE BARO SET PROC.		▽
1P160043	SET ALTIMETER BARO SETTING CONTROL	2.00	I
140032	MONITOR ALTIMETER BARO SETTING INDIC		▽
3H 03	CONTACT ATLANTA APPROACH CONTROL	2.65	I
3H 04	SET VHF-1 COMM TFR SW TO RIGHT	2.65	I
160004	DESCENT AND APPROACH CHECKLIST - 1		▽
1A 06	MON VHF-1 COMM TFR	2.39	I
160005	MON VHF-1 COMM AUDIO		▽
1P 02	ACT PUSH-TO-TALK SW	2.00	I
1A 10	COMM VIA VHF-1	2.00	I
1A 12	RADIO COMM -[ATLANTA APPROACH CONTROL, THIS IS NASA 515 LEVEL AT ONE ONE	6.00	I
1P160007	RETRIEVE CHECKLIST THOUSAND WITH INFORMATION LIMA, OVER]	4.00	I
BB 02	FIND CHECKLIST IN HANDBOOK	5.90	I
1P160008	MON VHF-1 COMM AUDIO	2.00	I
BB 05	MON RADIO COMM - [NASA 515, ROGER. SQUAWK IDENT.]	5.00	I
1A 15	PRESS ATC IDENT SW	2.50	I
1P160009	READ NEXT ITEM ON CHECKLIST	2.50	I
1N 07	C/P EXT VIS SCAN	2.14	I
BB 03		2.00	I
00EV06			▽

4900. 5400. 5900. 6400. 6900. 7400. 7900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P160044	CALL OUT-[ANTI-ICE]	1.00	I
8A 11	CRWMBR EXTERNAL VISION SCAN	30.00	0
1P160045	CALL OUT-[NOT RECD]	0.80	I
8B 03	READ NEXT ITEM ON CHECKLIST	2.00	I
1P160046	CALL OUT-[AIR CON- DITIONING AND PRES- SURIZATION]	1.00	I
7D 69	MON PASS CAB TEMP	2.67	I
7D 70	CONT SETTING	2.02	I
7E 08	MON CONT CAB TEMP	2.02	I
1P160047	CONT SETTING	1.17	I
160006	MON LGT ALT CNTR	1.17	I
8B 03	CALL OUT [SET]	0.40	I
1P160048	DESCENT AND APPROACH CHECKLIST - 2	2.00	I
8B 03	READ NEXT ITEM ON CHECKLIST	0.90	I
1P160049	CALL OUT-[START SWITCHES]	0.50	I
8B 03	MON VERBAL REPORT	2.00	I
1P160050	READ NEXT ITEM ON CHECKLIST	1.10	I
7G 17	CALL OUT-[INBOARD LANDING LIGHTS]	2.20	I
1P160051	SET LANDING LIGHTS	0.30	I
8B 03	SW TO ON	2.00	I
00EV03	CALL OUT-[ON]	0.30	I
8A 10	READ NEXT ITEM ON CHECKLIST	15.00	0
1P160052	C/P EXT VIS SCAN	1.40	I
3H 02	CRWMBR EXTERNAL VISION SCAN	2.97	I
9H 05	CALL OUT-[ALTIMETER AND INSTRUMENTS]	3.00	I
1P160053	MON CORR BARO ALT INDIC	1.30	I
160007	F.O. CHECK CAPT<S ALTIMETER BARO SET AND INDICATED ALTI- TUDE	1.30	I
	CALL OUT-[SET AND CROSSCHECKED]		I
	DESCENT AND APPROACH CHECKLIST - 3		0

4980. 5480. 5980. 6480. 6980. 7480. 7980.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
8B 03	READ NEXT ITEM ON CHECKLIST	2.00	I
1P160054	CALL OUT-[EPR AND IAS BUGS]	1.50	I
8B010004	RETRIEVE FLIGHT PLANNING REF. DATA MANUAL	3.00	I
8B160001	DETERMINE GO-AROUND EPR BUG SET VALUE	5.00	I
7F 26	SET ENG NO 1 EPR BUG	2.32	I
7F 27	MON ENG NO 1 EPR BUG	2.00	I
7F 28	SET ENG NO 2 EPR BUG	2.32	I
7F 29	MON ENG NO 2 EPR BUG	2.00	I
8B160002	DETERMINE LANDING V-REF BUG SET VALUE	5.00	I
3A 05	SET V-REF BUG	2.57	I
1P160055	CALL OUT -[V-REF IS XXX KNOTS]	1.90	I
00EV03	C/P EXT VIS SCAN		▽
8A 10	CRWMOR EXTERNAL VISION SCAN	15.00	I
3A 12	F.O. CHECK CAPTIS V-REF BUG SETTING	3.00	I
1P160056	CALL OUT -[BUGS SET AND CROSS-CHECKED]	1.60	I
8B 03	READ NEXT ITEM ON CHECKLIST	2.00	I
1P160057	CALL OUT -[CHECKLIST COMPLETED]	1.30	I
160008	CROSS NORCROSS VOR. RECEIVE INSTRUCTIONS TO TURN TO HDG 210 AND TO SLOW TO 200 KIAS		▽
1P160010	MON RADIO COMM - [NASA 515, TURN LEFT HEADING TWO ONE ZERO REDUCE SPEED TO TWO	4.00	I
1B 18	MON VHF-2 COMM AUDIO	6.00	I
8B 08	STOW CHECKLIST	3.00	I
8B010005	STOW FLIGHT PLANNING REF. DATA MANUAL	2.00	I
1P160011	ZERO ZERO, OVER]	2.00	I
00EV18	C/P EXT VIS SCAN		▽
8A 14	CRWMOR EXTERNAL VISION SCAN	1000.00	I
1B 17	COMM VIA VHF-2	5.00	I

4900. 5400. 5900. 6400. 6900. 7400. 7900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P160012	RADIO COMM -[515, ROGER, LEFT HEADING TWO ONE ZERO, SLOW TO TWO ZERO ZERO]	5.00	I
1B 25	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	5.00	I
160009	TURN TO HDG 210 AND SLOW TO 200 KIAS		▽
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
160010	TURN COMPLETE - ON HDG 210		▽
160011	SET FLAPS TO FLAPS 1		▽
1P 10	MON VERBAL REPORT	0.70	I
4E 07	SET FLAP CONT LEVER TO FLAPS 1	2.69	I
4E 15	MONITOR FLAP POSITION INDICATOR	2.23	I

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CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
4N 03	MON LE FLAPS-IN-TRANSIT LT ON	1.17	I
4N 04	MON LE FLAPS-IN-TRANSIT LT OFF	1.17	I
4E 16	CHECK FLAP LEVER AND POSITION INDIC AGREE	2.50	I
1P160058	CALL OUT -[FLAPS 1]	0.70	I
160013	SET NAV-1 TO RUNWAY 08 ILS -109.9		▽
08 06	RETRIEVE CHARTS	6.00	I
08160003	APPROACH PLATES		
	REVIEW CHARTS/PLATES TO DETERMINE NAVAID APP FREQS	5.00	I
SU 01	MON NAV-1 FREQ INDIC	5.00	I
SU 02	SET NAV-1 FREQ - WHOLE NO.S	3.00	I
SU 03	SET NAV-1 FREQ - FRACTIONS	2.00	I
1P160059	CALL OUT -[RUNWAY 08 ILS IS ON NAV 1]	2.90	I
5H 02	MON VOR POINTER NO.1 ON VOR/RMI 2 INDIC	2.27	I
160014	SET NAV-2 TO REG VOR -111.8		▽
5V 01	MON NAV-2 FREQ INDIC	4.91	I
5V 02	SET NAV-2 FREQ - WHOLE NO.S	2.93	I
5V 03	SET NAV-2 FREQ - FRACTIONS	1.98	I
5H 03	MON VOR POINTER NO.2 ON VOR/RMI 2 INDIC	2.27	I
1P160060	CALL OUT -[REG VOR IS ON NAV 2]	2.00	I
160015	RECEIVE INSTRUCTIONS TO SLOW TO 190 KIAS		▽
1P160014	MON RADIO COMM - [NASA 515. REDUCE SPEED TO ONE NINER ZERO KNOTS, OVER]	4.00	I
1B 37	MONITOR VHF-2 COMM	4.00	I
1B 15	COMM VIA VHF-2	2.50	I
1P160015	RADIO COMM - [515, ROGER, ONE IONER ZERO KNOTS]	2.50	I
1B 14	ACT PUSH-TO-TALK SW ON HANDGRIP	2.50	I

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CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
160017	SET FLAPS TO FLAPS 5		▽
160018	FLAP SET PROCEDURE		▽
1P 10	MON VERBAL REPORT	0.70	I
4E 09	SET FLAP CONT LEVER TO FLAPS 5	2.69	I
4N 03	MON LE FLAPS-IN-TRANSIT LT ON	1.17	I
4E 15	MONITOR FLAP POSITION INDICATOR	2.23	I
4E 16	CHECK FLAP LEVER AND POSITION INDIC AGREE	2.50	I
4N 04	MON LE FLAPS-IN-TRANSIT LT OFF	1.17	I
1P160061	CALL OUT - [FLAPS 5]	0.70	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 10	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	I
160019	HANDOFF TO APPROACH CONTROL -127.25		▽

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CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	I
1P160020	THOUSAND, OVER)	0.75	I
1B 19	MON VHF-2 COMM AUDIO	10.00	I
1P160021	MON RADIO COMM - [NASA 515, ATLANTA APPROACH, ROGER, SQUAWK IDENT]	3.50	I
1N 07 160020	PRESS ATC IDENT SW RECEIVE INSTRUCTIONS TO TURN TO HDG 270, REDUCE SPEED TO 170, AND TO DESCEND TO 4500 FT.	2.14	I ▽
1P160022	MON RADIO COMM - [NASA 515, TURN RT HEADING TWO SEVEN ZERO, REDUCE SPEED	3.00	I
1B 19	MON VHF-2 COMM AUDIO	7.00	I
1P160023	TO ONE SEVEN ZERO KNOTS, DESCEND AND MAINTAIN FOUR FIVE HUNDRED, OVER)	4.00	I
1B 17	COMM VIA VHF-2	6.00	I
1P160024	RADIO COMM - [515, ROGER, LEFT HEADING TWO SEVEN ZERO, SLOW TO ONE SEVEN ZERO,	4.00	I
1B 25 160021	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP BEGIN TURN TO HDG 270	6.00	I ▽
1P160025	MAINTAIN FOUR FIVE HUNDRED.]	2.00	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I

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CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
160023	REACH 170 KIAS		▽
160024	BEGIN DESCENT TO 4500 FT.		▽
160010	FLAP SET PROCEDURE		▽
160025	SET FLAPS TO FLAPS 15		▽
1P 10	MON VERBAL REPORT	0.70	
4E 11	SET FLAP CONT LEVER TO FLAPS 15	2.46	
4E 15	MONITOR FLAP POSITION INDICATOR	2.23	
4N 03	MON LE FLAPS-IN- TRANSIT LT ON	1.17	
4E 16	CHECK FLAP LEVER AND POSITION INDIC AGREE	2.50	
4N 04	MON LE FLAPS-IN- TRANSIT LT OFF	1.17	
1P160062	CALL OUT - [FLAPS 15]	0.70	
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 30	MON ENG NO 2 EPR IND	0.44	

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CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
160000	TURN ON LANDING LTS		▽
7G 17	SET LANDING LIGHTS SW TO ON	2.20	
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	

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CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
140023	REPORT 1000 FT TO LEVEL OFF		▽
3H 02	MON CORR BARO ALT INDIC	2.13	I

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CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P140045	CALL OUT -[1000 FEET TO LEVEL OFF]	1.70	I
160026	LEVEL OFF AT 4500 FT		▽
160038	SET DECISION HEIGHT ON RADIO ALTIMETER		▽
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRATION AMPLITUDE INDIC	0.44	I
7F 20	MON NO 2 ENG VIBRATION AMPLITUDE INDIC	0.44	I
160039	SET ADF-1 TO LAKE-SIDE -375KC		▽
5D 17	SET ADF NO.1 BFO SW TO OFF	3.00	I
5D 22	MON ADF NO.1 TUNING METER INDIC	0.77	I
5D 01	MONITOR ADF NO 1 FREQ INDIC	1.98	I
5D 02	SELECT ADF NO 1 FREQ INDIC	1.98	I
1P160065	CALL OUT -[LAKESIDE ON ADF-1]	1.50	I

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CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
160048	SET ADF-2 TO LAKE-SIDE -375		▽
5E 17	SEL ADF NO.2 FREQ	2.69	
5E 20	BAND .19-.48 MON ADF NO.2 TUNING	2.26	
5E 01	METER INDIC MON ADF NO 2 FREQ.	1.98	
5E 02	INDIC SELECT ADF NO 2 FREQ	1.98	
1P160066	CALL OUT -[LAKE-SIDE ON ADF-2]	1.50	
160027	RECEIVE INSTRUCTIONS TO SLOW TO 160 KIAS.		▽
1B 37	MONITOR VHF-2 COMM	4.00	
1P160063	MON RADIO COMM - [NASA 515. REDUCE SPEED TO ONE SIX ZERO KNOTS. OVER]	4.00	
1B 14	ACT PUSH-TO-TALK SW ON HANDGRIP	2.50	
1B 15	COMM VIA VHF-2	2.50	
1P160064	RADIO COMM-[515, ROGER. ONE SIX ZERO KNOTS]	2.50	
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
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CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
050007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 16	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
160030	RECEIVE INSTRUCTIONS TO TURN TO HDG 180		▽
1P160026	MON RADIO COMM - (NASA 515, TURN LEFT HEADING ONE EIGHT ZERO, OVER)	3.50	
1B 10	MON VHF-2 COMM AUDIO	3.50	
1B 26	ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	3.00	

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CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1B 32	COMM VIA VHF-2	3.00	
1P160027	RADIO COMM -[515 ROGER, LEFT HEADING ONE EIGHT ZERO.]	3.00	
160031	TURN TO HDG 180		▽
030007	ENGINE INSTRUMENT SCAN		▽
7F 30	MON ENG NO 2 EPR IND	0.44	
7F 25	MON ENG NO 1 EPR IND	0.44	
7F 21	MON NO 1 ENG N1 IND	0.44	
7F 22	MON NO 2 ENG N1 IND	0.44	
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	
7F 23	MON NO 1 ENG N2 IND	0.44	
7F 24	MON NO 2 ENG N2 IND	0.44	
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	
160032	TURN COMPLETE - ON HDG 180		▽
160039	RECEIVE FINAL APPROACH INSTRUCTION		▽
1B 37	MONITOR VHF-2 COMM	15.00	
1P160028	MON RADIO COMM - CNASA 515, YOU ARE FOURTEEN MILES FROM THE OUTER MARKER.	3.21	

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CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P160029	TURN LEFT HEADING ONE TWO ZERO FOR VECTOR TO INTERCEPT FINAL APPROACH	4.28	I
1P160030	COURSE. YOU ARE CLEARED FOR AN ILS RUNWAY ZERO EIGHT APPROACH. CONTACT TOWER AT THE OUTER MARKER ON ONE ONE NINER POINT FIVE. OVER]	4.28	I
1P160031	COMM VIA VHF-2 RADIO COMM- [515. ROGER. LEFT HEADING ONE TWO ZERO. ILS RUNWAY ZERO EIGHT ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP APPROACH. TOWER AT OUTER MARKER ON ONE ONE NINER POINT FIVE BEGIN TURN TO HDG 120	3.21	I
1B 17	TUNE ATLANTA TOWER -119.5	7.00	I
1P160032	MON VHF-2R FREQ IND SET VHF-2R FREQ - WHOLE NO. 5	4.00	I
1B 26	SET VHF-2R FREQ - FRACTIONS	7.00	I
1P160033	TUNE NAV-1 TO RWY 08 ILS -109.9	3.00	I
160035	MON NAV-1 FREQ INDIC SET NAV-1 FREQ - WHOLE NO. 5		▽
160034	SET NAV-1 FREQ - FRACTIONS		▽
1B 07	CALL OUT -[ILS ON NAV 1]	4.06	I
1B 08	TURN COMPLETE - ON HDG 120	2.00	I
1B 09	CAPTURE ILS LOC BEGIN TURN TO HDG 090	1.98	I
160043			▽
5U 01		5.00	I
5U 02		3.00	I
5U 03		2.00	I
1P160069		1.50	I
160036			▽
160037			▽

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CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
SR 59	MON INITIAL MOVEMENT OF ROLL COMMAND BAR ON FDI	2.58	I
1P160067	CALL OUT -[LOCALIZER ALIVE]	1.90	I
1P 02 160044	MON VERBAL REPORT TURN COMPLETE - ON HDG.090 -RWY 08 HDG	2.00	I ▽
160045	ANNUNCIATOR RECALL		▽
7A 20	ACTUATE ANNUN PNL RECALL SW	2.28	I
7A 36 160047	MON ALL ANNUN LTS MON INSTRUMENTS ON FINAL APP	0.53	I ▽
3L 02	MON VERTICAL SPEED INDIC	5.00	I
3R 62	MONITOR LOCALIZER INDICATOR ON FDI	5.00	I
3S 04	MON A/C POSITION RELATIVE TO SELECTED COURSE ON CI	5.00	I
3R 63	MON GLIDE SLOPE ATT INDIC ON FDI	5.00	I
3A 10	MONITOR AIRSPEED INDIC	5.00	I
3H 07 160048	MON ALTIMETER MON ADF/RM1-2	5.00	I ▽
5E 26	MON ADF NO.1 POINTER ON ADF/RM1 2 INDIC	2.26	I
160049	MON RADIO ALTIMETER		▽
3J 01	MON RADIO ALT ALTITUDE INDIC	2.00	I
160047	MON INSTRUMENTS ON FINAL APP		▽
3R 63	MON GLIDE SLOPE ATT INDIC ON FDI	5.00	I
3A 10	MONITOR AIRSPEED INDIC	5.00	I
3H 07	MON ALTIMETER	5.00	I
3L 02	MON VERTICAL SPEED INDIC	5.00	I
3R 62	MONITOR LOCALIZER INDICATOR ON FDI	5.00	I
3S 04	MON A/C POSITION RELATIVE TO SELECTED COURSE ON CI	5.00	I
160048	MON ADF/RM1-2		▽

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CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
SE 26	MON ADF NO.1 POINTER	2.26	I
160047	ON ADF/RMI 2 INDIC		▽
3H 07	MON INSTRUMENTS ON FINAL APP	5.00	I
3L 02	MON ALTIMETER	5.00	I
3R 62	MON VERTICAL SPEED INDIC	5.00	I
3S 04	MONITOR LOCALIZER INDICATOR ON FDI	5.00	I
3R 63	MON A/C POSITION RELATIVE TO SELECTED COURSE ON CI	5.00	I
3A 10	MON GLIDE SLOPE ATT INDIC ON FDI	5.00	I
160048	MONITOR AIRSPEED INDIC		▽
SE 26	MON ADF/RMI-2	2.26	I
160050	MON ADF NO.1 POINTER ON ADF/RMI 2 INDIC		▽
1B 10	RECEIVE INSTRUCTIONS TO SLOW TO 150	3.50	I
1P160034	MON VHF-2 COMM AUDIO	3.50	I
1B 15	MON RADIO COMM- [NASA 515. REDUCE SPEED TO ONE FIVE ZERO KNOTS OVER]	2.50	I
1P160035	COMM VIA VHF-2 RADIO COMM -[515. ROGER. ONE FIVE ZERO KNOTS]	2.50	I
1B 14	ACT PUSH-TO-TALK SW ON HANDGRIP	2.50	I
160055	RECEIVE INSTRUCTIONS TO MAINTAIN CURRENT SPEED		▽
160053	SET FLAPS TO FLAPS 25		▽
1P160036	MON RADIO COMM - [NASA 515. MAINTAIN CURRENT SPEED UNTIL CROSSING STUBBS OVER]	3.50	I
1B 10	MON VHF-2 COMM AUDIO	3.50	I
4E 12	SET FLAP CONT LEVER TO FLAPS 25	2.90	I
160054	ACQUIRE GLIDESLOPE		▽

4980. 5480. 5980. 6480. 6980. 7480. 7980.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
3R 60	MON INITIAL MOVEMENT OF GLIDE SLOPE	2.58	I
1P160071	COMMAND BAR ON FDI CALL OUT -[GLIDE SLOPE ALIVE]	1.00	I
1B 20	MON VHF-2 COMM AUDIO	1.70	I
1P160037	RADIO COMM - [515. ROGER]	1.70	I
1B 14	ACT PUSH-TO-TALK SW ON HANDGRIP	1.70	I
1P160070	CALL OUT -[FLAPS 25]	0.70	I
160047	MON INSTRUMENTS ON FINAL APP		▽
3H 07	MON ALTIMETER	5.00	I
3L 02	MON VERTICAL SPEED INDIC	5.00	I
3R 62	MONITOR LOCALIZER INDICATOR ON FDI	5.00	I
3S 04	MON A/C POSITION RELATIVE TO SELECTED COURSE ON CI	5.00	I
3R 63	MON GLIDE SLOPE ATT INDIC ON FDI	5.00	I
3A 10	MONITOR AIRSPEED INDIC	5.00	I
160048	MON ADF/RMI-2		▽
5E 26	MON ADF NO.1 POINTER ON ADF/RMI 2 INDIC	2.26	I
160056	BEGIN DECELERATION TO 135 KNOTS		▽
1P160072	CALL OUT -[CROSSING STUBBS]	1.00	I
160057	SET FLAPS TO FLAPS 40		▽
4E 14	SET FLAP CONT LEVER TO FLAPS 40	2.92	I
160070	SET AUTO BRAKES		▽
4D 43	SET AUTO BRAKE SEL SW TO MED	2.62	I
4D 40	MON AUTO BRAKE INOP LT OFF	0.26	I
1P160073	CALL OUT -[FLAPS 40]	0.70	I
160047	MON INSTRUMENTS ON FINAL APP		▽
3A 10	MONITOR AIRSPEED INDIC	5.00	I
3H 07	MON ALTIMETER	5.00	I

4980. 5480. 5980. 6480. 6980. 7480. 7980.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
3L 02	MON VERTICAL SPEED INDIC	5.00	I
3R 62	MONITOR LOCALIZER INDICATOR ON FDI	5.00	I
3S 04	MON A/C POSITION RELATIVE TO SELECTED COURSE ON CI	5.00	I
3R 63	MON GLIDE SLOPE ATT INDIC ON FDI	5.00	I
030007	ENGINE INSTRUMENT SCAN		▽
7F 25	MON ENG NO 1 EPR IND	0.44	I
7F 30	MON ENG NO 2 EPR IND	0.44	I
7F 22	MON NO 2 ENG N1 IND	0.44	I
7F 21	MON NO 1 ENG N1 IND	0.44	I
7F 32	MON ENG NO 2 EXH GAS TEMP IND	0.44	I
7F 31	MON ENG NO 1 EXH GAS TEMP IND	0.44	I
7F 24	MON NO 2 ENG N2 IND	0.44	I
7F 23	MON NO 1 ENG N2 IND	0.44	I
7F 34	MON ENG NO 2 FUEL FLOW INDIC	0.44	I
7F 33	MON ENG NO 1 FUEL FLOW INDIC	0.44	I
7F 09	MON NO 1 ENG OIL PRESS INDIC	0.44	I
7F 18	MON NO 2 ENG OIL TEMP INDIC	0.44	I
7F 10	MON NO 1 ENG OIL TEMP INDIC	0.44	I
7F 19	MON NO 2 ENG OIL QTY INDIC	0.44	I
7F 11	MON NO 1 ENG OIL QTY INDIC	0.44	I
7F 20	MON NO 2 ENG VIBR AMPLITUDE INDIC	0.44	I
7F 12	MON NO 1 ENG VIBRA- TION AMPLITUDE INDIC	0.44	I
160047	MON INSTRUMENTS ON FINAL APP		▽
3L 02	MON VERTICAL SPEED INDIC	5.00	I
3R 62	MONITOR LOCALIZER INDICATOR ON FDI	5.00	I

4900.

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5900.

6400.

6900.

7400.

7900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
3S 1 04	MON A/C POSITION RELATIVE TO SELECTED COURSE ON CI	5.00	I
3R 63	MON GLIDE SLOPE	5.00	I
3A 10	ATT INDIC ON FDI	5.00	I
3H 07	MONITOR AIRSPEED INDIC	5.00	I
160049	MON ALTIMETER	5.00	I
3J 01	MON RADIO ALTIMETER	2.00	I
160059	MON RADIO ALT ALTITUDE INDIC	2.00	I
00EV14	CROSS RMY XX OUTER MARKER	200.00	I
0A 13	C/P EXT VIS SCAN C/WMBR EXTERNAL VISION SCAN	200.00	I
1P 13	MON VERBAL REPORT	1.00	I
160060	EXTEND LANDING GEAR	3.27	I
4D 03	SET LANDING GEAR LEVER TO DOWN POSITION	0.54	I
4D 05	MONITOR NOSE GEAR DOWN AND LOCKED LT ON	0.54	I
4D 09	MONITOR LEFT/RT GEAR DOWN AND LOCKED LT ON	0.54	I
160047	MON INSTRUMENTS ON FINAL APP	5.00	I
3H 07	MON ALTIMETER	5.00	I
3L 02	MON VERTICAL SPEED INDIC	5.00	I
3R 62	MONITOR LOCALIZER INDICATOR ON FDI	5.00	I
3S 04	MON A/C POSITION RELATIVE TO SELECTED COURSE ON CI	5.00	I
3R 63	MON GLIDE SLOPE	5.00	I
3A 10	ATT INDIC ON FDI	5.00	I
160049	MONITOR AIRSPEED INDIC	5.00	I
3J 01	MON RADIO ALTIMETER	2.00	I
160064	MON RADIO ALT ALTITUDE INDIC CROSS RMY 08 MIDDLE MARKER	2.00	I

4900. 5400. 5900. 6400. 6900. 7400. 7900.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
160065	DESCEND THRU		▽
160058	-DECISION HEIGHT		▽
3V 13	REPORT RUNWAY IN SIGHT	1.91	I
3R 12	MONITOR MIDDLE MARKER ANNUN LT ON AND AUDIBLE SIGNAL	2.58	I
0A 01	MON DECISION HGT LT ON FDI	2.00	I
1P160074	VIEW RUNWAY AHEAD	1.00	I
1P160086	CALL OUT -[RUNWAY IN SITE]	0.80	I
160067	CALL OUT -[DECISION HEIGHT]		▽
160071	CROSS END OF RWY 08		▽
1B 18	HANDOFF TO GROUND CONTROL -121.9	6.00	I
1P160007	MON VHF-2 COMM AUDIO	3.50	I
1P160008	MON RADIO COMM - [NASA 515, EXIT RUNWAY NEXT INTERSECTION, CONTACT GROUND	2.50	I
1P160009	POINT NINER WHEN CLEAR OF RUNWAY, OVER]	2.50	I
1B 14	RADIO COMM -[515, ROGER, POINT NINER WHEN CLEAR]	2.50	I
1B 15	ACT PUSH-TO-TALK SW ON HANDGRIP	2.50	I
1B 02	COMM VIA VHF-2	2.50	I
1B 01	SET VHF-2L FREQ - WHOLE NO. 5	2.90	I
1B 03	MON VHF-2L FREQ IND	5.08	I
1B 05	SET VHF-2L FREQ - FRACTIONS	1.98	I
1P160090	SET VHF-2 COMM TFR SW TO LEFT	1.45	I
1B 29	RADIO COMM -[ATLANTA GROUND, THIS IS NASA 515, TAXI TO GATE X, OVER]	3.50	I
1B 16	ACTUATE COMM 2 PUSH-TO-TALK SW	3.50	I
	COMM VIA VHF-2	3.50	I

4980. 5480. 5980. 6480. 6980. 7480. 7980.

CODE	EVENT/PROCEDURE OR TASK DESCRIPTION	TASK DUR (SEC)	TIME IN SECONDS
1P160091	MON RADIO COMM - [NASA 515, ATLANTA GROUND, TAXI TO RAMP VIA NORTHEAST-SOUTH- MON VHF-2 COMM AUDIO	3.50	
1B 18	WEST TAXIWAY, OVER]	3.50	
1P160092	RADIO COMM -	1.00	
1P160037	[515, ROGER]	1.70	
1B 29	ACTUATE COMM 2 PUSH- TO-TALK SW	1.70	
1B 15	COMM VIA VHF-2	1.70	
			4900. 5400. 5900. 6400. 6900. 7400. 7900.

3.0 FORWARD FLIGHT DECK AUTOPILOT SCENARIO DATA FILE

The data file consists of four parts: a Phase Library, an Event/Procedure Library, a Task Library, and a Subsystem Library. The modular construction allows for ease of file maintenance and modification. It also avoids the need to duplicate data as single tasks may be used in several procedures and individual procedures may be used in many phases.

***** LAST EDIT 4 SEP 1978 *****
 ***** LAST BKUP 4 SEP 1978 *****

PHASES									
0100 PRE/START PREP - FFD	010001	0	010030	30	010003	141	010031	205	
	010002	215	010004	220	010005	320	010007	430	
	010032	440	010008	443	010033	445	010009	457	
	010010	509	010011	523	010012	538	010034	545	
	010013	553	010035	625	010036	637	010014	641	
	010015	652	010016	710	010017	721	010018	740	
	010019	753	010020	800	010037	810	010038	822	
	010039	830	010021	840	010022	845	010040	850	
	010041	900	010042	905	010050	935	010051	1006	
	010052	1042	010053	1119	010054	1151	010056	1205	
	010055	1225	010057	1300	010058	1320	010059	1440	
	010060	1445	010061	1515	010062	1516			
0200 PRE-START PREP - AFD	010001	0			020008	140	010031	205	
	010002	215	010004	217			020009	315	
	020001	315	010005	320	010007	422	010008	435	
	010035	407	020010	417	020011	500	010009	455	
	010010	507	020012	510	020013	515	020014	527	
	010011	520	020015	534	010012	542	020016	550	
	010013	557	020017	605	020018	618	020019	630	
	020020	630	020021	641	020022	641	020002	645	
	020003	650	020004	659	020024	659	020023	659	
	020005	714	010016	721	010017	730	010018	749	
	020006	802	010019	819	010020	826	020025	830	
	020026	830							
	020027	843	020028	843	020029	900	020030	903	
	010021	904	010022	907	020031	909	020032	909	
	020033	924	020007	924	020035	927	020034	927	
	010042	935	020041	938	020036	941	020037	941	
	020038	954	020034	957	020047	957	020039	1008	
	020040	1008	020042	1020	020043	1028	020043	1034	
	020043	1040	020043	1046	020043	1052	020043	1058	
	020043	1104	020043	1110	020043	1116	020044	1122	
	010050	1130	010051	1201	010052	1233	010053	1312	
	010054	1344	020045	1358	020046	1414	010055	1434	
	010057	1506	010058	1526	010059	1646	010060	1650	
	010062	1721	010061	1721					
0300 ENGINE START	030001	0	030002	50	030007	135	030003	140	
	00EV31	220	030004	230	030005	254	030006	306	
	00EV21	315							
A400 TAXI BEFORE TAKEOFF	040001	0	0 0 040002	18	030007	100	030007	200	
FFD	040003	248	030007	300	030007	400	040004	454	
	030007	500	030007	600	040005	624	030007	700	
	040006	721							
	040007	821	040008	1008					
B400 TAXI BEFORE TAKEOFF	040001	0	0 0 040002	18	030007	100	030007	200	
AFD	040003	248	030007	300	030007	400	00EV33	400	
	040004	454	00EV30	540					
	030007	500	030007	600	040005	624	030007	700	
	040006	732	00EV26	745	040007	821	040008	1008	
A700 TAKEOFF - FFD	00EV13	00	070001	00	070002	24	070003	49	
	070008	110	070004	120	00EV12	140	070005	240	
	070006	245	030007	313	070007	317			
B700 TAKEOFF - AFD	00EV12	00	070001	00	070002	24	070012	49	
	00EV32	00	00EV24	100	00EV02	100	00EV13	120	
	070009	110	070012	120	070013	130	070013	145	

	00EV29	205	070015	245	070010	250	030007	310
	070011	322						
A900 NOISE ABATEMENT	090001	0	090002	0	090003	0	00EV18	00
	090004	10	090054	10				
CLIMB - NORMAL AWY-	030007	15	090054	20	090003	20	090005	20
FFD	090002	30	090006	30	090003	32	090002	40
	090003	42	030007	45	090002	50	090003	52
	090008	100	090009	102	090007	103	090002	108
	090003	108	030007	110	090008	118	090009	118
	090010	123	090008	125	090009	125	090003	130
	090009	140	030007	140	090012	142	090011	145
	090016	145	090017	145	090013	152	090021	155
	090014	205	090018	215	090019	215	030007	230
	030007	300	090002	315	090003	315	090015	315
	090002	325	090003	325	090020	335	090003	335
	090008	355	030007	355	090018	405	090019	405
	090023	410	090024	500	090018	505	090019	505
	030007	510	090018	605	090019	605	030007	605
	090025	650	090016	705	090017	705	090026	707
	140023	707	030007	710	090002	735	090003	735
	090008	745	090009	745	090027	750	090018	750
	090019	750	030007	755	090018	850	090019	850
	030007	850	030007	945	090018	950	090019	950
	090016	1050	090017	1050	030007	1100	090016	1120
	090017	1120	090028	1140	090018	1150	090019	1150
	090018	1250	090019	1250	090029	1310	090016	1350
	090017	1350	030007	1410	090030	1430	090018	1430
	090019	1430	030007	1455	030007	1515	090018	1530
	090019	1530	030007	1555	090016	1630	090017	1630
	00EV09	1640						
	090031	1645	090032	1700	140023	1705	030007	1710
	090016	1705	090017	1705	090033	1715	090008	1735
	00EV15	1740	090009	1735	090034	1740	090035	1800
	090036	1805	090037	1805	030007	1825	030007	1925
	090037	1935	030007	2025	090039	2105	030007	2125
	030007	2225	00EV05	2245	090038	2305	090039	2305
	00EV05	2245						
	090040	2305	030007	2330	00EV12	2330	090018	2505
	030007	2425						
	00EV03	2425	00EV15	2435				
	090019	2505	030007	2525	030007	2625	090041	2605
	090016	2610	090017	2610	090002	2640	090003	2640
	090042	2650	090002	2650	090003	2650	090002	2700
	090003	2700	090043	2700	090044	2710	090038	2720
	090039	2720	030007	2825	090045	2845	090002	2920
	00EV01	2935						
	090003	2920	030007	2925	090002	2930	090003	2930
	00EV03	2930	090008	2940	090009	2940		
B900 NOISE ABATEMENT	090001	0	090050	0	00EV13	00	030007	18
	00EV38	18						
CLIMB - AREA NAV -	090052	18	090053	18	090054	18	090054	28
AFD	090055	25	090006	33	090007	111	090011	131
	090056	131	090057	131	090067	136	030007	140
	00EV03	150						
	090012	140	090076	148	090013	200	090051	200
	090014	205	030007	240	090051	300	00EV13	218
	030007	340	00EV07	358				
	090058	353	090059	353	090051	400	090024	433
	090024	443	030007	450	090051	500	030007	550
	00EV18	448						

A9FE NOISE ABATEMENT
CLIMB - NORMAL AWY-
HYD SYS B PUMP OVHT

090051	600	030007	650	090051	700	090003	708
030007	750	090051	800	090064	823	090065	823
090066	833	090067	833	030007	850	090051	900
090069	915	090068	919	090070	925	090071	930
090072	945	090051	1000	140023	1025	090073	1030
030007	1050	090051	1100	090074	1125	090075	1125
030007	1150	090051	1200	030007	1250	090051	1300
090078	1328	030007	1350	090051	1400	090071	1421
030007	1450	090051	1500	090079	1524	090072	1538
030007	1550	090051	1600	140023	1627	090073	1631
00EV37	1640						
030007	1650	090051	1700	090080	1727	090075	1727
090081	1742	030007	1750	090051	1800	030007	1850
090051	1900	030007	1950	090051	2000	030007	2050
090051	2100	090082	2132	090078	2140	090083	2146
00EV14	2128						
090051	2200	030007	2200	090051	2300	030007	2300
090048	2320						
030007	2400	090051	2400	00EV12	2410	140023	2415
00EV01	2455	090048	2448	00EV24	2500		
090001	0	090002	0	090003	0	090004	10
030007	15	090002	20	090003	20	090005	20
090002	30	090006	30	090003	32	090002	40
090003	42	030007	45	090002	50	090003	52
090008	100	090009	102	090007	103	090002	108
090003	108	030007	110	090008	118	090009	118
090010	123	090008	125	090009	125	090003	130
090009	140	030007	140	090012	142	090011	145
090016	145	090017	145	090013	152	090021	155
090014	205	090018	215	090019	215	030007	230
030007	300	090002	315	090003	315	090015	315
090002	325	090003	325	090020	335	090003	335
030007	355	090022	405	090018	405	090019	405
090023	410	090024	500	090018	505	090019	505
030007	510	090018	605	090019	605	030007	605
090025	650	090016	705	090017	705	090026	707
140023	707	030007	710	090002	735	090003	735
090008	745	090009	745	090027	750	090018	750
090019	750	030007	755	090018	850	090019	850
030007	850	030007	945	090018	950	090019	950
090016	1050	090017	1050	030007	1100	090016	1120
090017	1120	090028	1140	090018	1150	090019	1150
09FE01	1210						
090018	1250	090019	1250	090029	1310	090016	1350
090017	1350	030007	1410	090030	1430	090018	1430
090019	1430	030007	1455	030007	1515	090018	1530
090019	1530	030007	1555	090016	1630	090017	1630
090031	1645	090032	1700	140023	1700	030007	1705
090016	1705	090017	1705	090033	1715	090008	1735
090009	1735	090034	1740	090035	1800	090036	1805
090037	1805	030007	1825	030007	1925	030007	2025
030007	2125	030007	2225	090038	2305	090039	2305
090040	2305	030007	2325	030007	2425	090018	2505
090019	2505	030007	2525	030007	2625	090041	2605
090016	2610	090017	2610	090002	2640	090003	2640
090042	2650	090002	2650	090003	2650	090002	2700
090003	2700	090043	2700	090044	2710	090038	2720
090039	2720	030007	2825	090045	2845	090002	2920
090003	2920	030007	2925	090002	2930	090003	2930
090003	2940	090009	2940				

B9EA ENGINE FIRE - NOISE	B9EA01000000	B9EA02	0000	B9EA03	44	130007	122
ABMNT CLIMB	B9EA04	122	B9EA05	148			
B9FE NOISE ABATEMENT	090060	0	090050	0	090051	0	030007 18
CLIMB - AREA NAV -	090052	18	090053	18	090054	18	090054 25
HYD SYS B PUMP OVHT	090055	25	090006	33	090007	111	090011 131
	090056	131	090057	131	090067	136	030007 140
	090012	140	090076	148	090013	200	090051 200
	090014	205	030007	240	090051	300	030007 340
	090058	353	090059	353	090051	400	090061 433
	090062	443	030007	450	090051	500	030007 550
	090051	600	030007	650	090051	700	090003 708
	030007	750	090051	800	090064	823	090065 823
	090066	833	090067	833	030007	850	090051 900
	090069	915	090068	923	090070	925	090071 930
	090072	945	09FE01	952			
			090051	1000	140023	1025	090073 1030
	030007	1050	090051	1100	090074	1125	090075 1125
	030007	1150	090051	1200	030007	1250	090051 1300
	090078	1328	030007	1350	090051	1400	090071 1421
	030007	1450	090051	1500	090079	1524	090072 1538
	030007	1550	090051	1600	140023	1627	090073 1631
	030007	1650	090051	1700	090080	1727	090075 1727
	090081	1742	030007	1750	090051	1800	030007 1850
	090051	1900	030007	1950	090051	2000	030007 2050
	090051	2100	090082	2132	090078	2140	090083 2146
	090051	2200	030007	2200	090051	2300	030007 2300
	030007	2400	090051	2400	140023	2415	
1100 CRUISE - NORMAL AWY	110001	0	0	090036	0	110002	0
	00EV17	00	030007	40	110003	140	030007 140
	030007	240	090037	200	090037	330	
	090038	500	090039	500	110004	625	090038 700
	090039	700	00EV12	820	110005	845	110006 900
	110007	905					
	090038	910	090039	910	030007	340	030007 440
	030007	540	030007	640	030007	740	030007 840
	110008	930	030007	950	00EV14	1015	030007 1040
	090038	1110					
	090039	1110	030007	1140	110009	1150	030007 1240
	090002	1310	090003	1310	110010	1320	090002 1320
	090003	1320	090008	1330	090009	1330	
11XX CRUISE - NORMAL AWY- MULTIPLE FAULTS	110001	0	0	090036	0	0	110002 0
	11FD01	25	030007	40	110003	40	030007 140
	11AF01	153	030007	240	030007	340	11CB01 408
	090038	500	090039	500	030007	540	030007 640
	090038	700	090039	700	030007	740	030007 840
	110005	845	110006	900	110007	905	
	090038	910	090039	910			
	110008	930	030007	950	030007	1040	090038 1110
	090039	1110	030007	1140	110009	1150	030007 1240
	090002	1310	090003	1310	110010	1320	090002 1320
	090003	1320	090002	1330	090003	1330	
1300 CRUISE - AREA NAV	110001	0	130001	0	130002	0	00EV17 00
	030007	30	00EV38	00			
	110003	40	090051	100	030007	130	090051 200
	030007	230	090051	300	030007	330	090051 400
	030007	430	090051	500	030007	530	090051 600
	030007	630	090051	700	030007	730	090051 800
	00EV16	820					
	130003	825	030007	830	090051	900	030007 930
	090051	1000	130004	1025	030007	1100	090051 1100

13XX CRUISE - AREA NAV
MULTIPLE FAULTS

1400 DESCENT - FFD

030007	1200	090051	1200	130005	1210	130006	1220
130007	1220	030007	1300	090051	1300	030007	1400
090051	1400	030007	1500	090051	1500	130008	1520
130009	1520	130010	1540	130011	1540	130012	1548
130013	1548	090051	1600	130014	1608	130015	1608
130016	1623	130017	1640	020035	1645	130018	1645
00EV35	1640						
090051	1700	020030	1658	020034	1703	130027	1703
130019	1715	130020	1715	130019	1738	130028	1738
090051	1800	020036	1800	130015	1800	020034	1815
130029	1817	130021	1830	130022	1841	130030	1850
130013	1850	090051	1900	130024	1906	020043	1917
020043	1923	020043	1929	020044	1935	130026	1945
030007	1945	00EV13	1950				
090051	2000	030007	2010	090051	2100	030007	2110
00EV09	2130	00EV24	2140	090051	2150		
		110001	0	130001	0	130002	0
030007	30	110003	40	090051	100	030007	130
090051	200	030007	230	11FD01	245	090051	300
030007	330	090051	400	11AF01	413	030007	430
090051	500	030007	530	090051	600	11CB01	628
		090051	700	030007	730	090051	800
130003	825	030007	830	090051	900	030007	930
090051	1000	130004	1025	030007	1100	090051	1100
030007	1200	090051	1200	130005	1210	130006	1220
130007	1220	030007	1300	090051	1300	030007	1400
090051	1400	030007	1500	090051	1500	130008	1520
130009	1520	130010	1540	130011	1540	130012	1548
130013	1548	090051	1600	130014	1608	130015	1608
130016	1623	130017	1640	020025	1645	130018	1645
090051	1700	020030	1658	020034	1703	130027	1703
130019	1715	130020	1715	130019	1738	130028	1738
090051	1800	020036	1800	130015	1800	020034	1815
130029	1815	130021	1830	130022	1841	020039	1850
130013	1850	090051	1900	130024	1906	020043	1917
020043	1923	020043	1929	020044	1935	130026	1945
090051	2000	030007	2010	090051	2100	030007	2110
090051	1950	030007	1945				
				00EV15	00	140001	0
140002	0	140003	0	090038	10	090039	10
030007	26	030007	135	090008	210	090009	210
140003	215	140004	215	090018	225	090019	225
030007	235	140005	305	140006	325	140007	325
030007	335	090002	335	090003	335	030007	435
00EV12	500						
090038	345	090039	345	140008	447	030007	535
140007	545	140009	545	090036	555	090037	555
00EV04	600						
140010	605	140011	615	030007	635	00EV17	635
030007	725	090037	725	140012	745		
030007	835	090039	855	030007	935	030007	1035
090002	1055	090003	1055	140013	1055	140003	1105
140014	1105	090036	1115	090037	1115	030007	1135
030007	1235	090037	1245	030007	1335		
090039	1415	030007	1435	030007	1535		
090018	1615	090019	1615	030007	1635	090016	1715
090017	1715	030007	1735	090008	1745	090009	1745
090036	1750	090037	1750	140015	1750	140016	1750
140017	1811	140018	1831	140032	1838	030007	1840

	090037	1920	030007	1935	030007	2035	090039	2050
	030007	2135	030007	2235	00EV03	2235		
	00EV03	2235						
	140019	2240	140020	2245	090018	2250	090019	2250
	00EV18	2305						
	140022	2255	140023	2256	140021	2310	030007	2335
	140003	2350	140024	2350			110012	2400
	140025	2405	030007	2435	140026	2510		
	030007	2535						
	030007	2635	030007	2735	030007	2835	140027	2845
	030007	2935	030007	3035	030007	3135	030007	3235
	00EV16	3240						
	030007	3335	140028	3405	140003	3420	140029	3420
	090038	3430	090039	3430	030007	3435	030007	3535
	090038	3630	090039	3630	030007	3635	030007	3735
	140023	3805	160000	3815	090016	3830	090017	3830
	090002	3900	090003	3900	140003	3910	140030	3910
	090002	3920	090003	3920	140031	3930	030007	3935
	090002	3930	090003	3930				
	150001	00	00EV19	00	150002	15	090051	25
	00EV23	00	00EV29	30	150004	35		
	150005	57	030007	100	150006	115	090051	120
	00EV38	130						
	030007	200	090051	220	150007	240	150008	240
	150020	240	090051	320	030007	350	030007	400
	090051	420	030007	500	090051	520	030007	600
	090051	620	030007	700			150009	720
	150010	740	030007	800	090051	800	030007	900
	090051	900	030007	1000	090051	1000	030007	1100
	090051	1100	030007	1200	090051	1200	150011	1240
	030007	1300	090051	1300	150012	1300	140032	1310
	150013	1310	090051	1400	030007	1402	030007	1500
			150014	1500	150015	1535	030007	1600
	090051	1602	030007	1700	090051	1700	030007	1800
	090051	1800	030007	1900	090051	1900	150016	1950
	00EV37	1810						
	090051	2000	030007	2100	090051	2100	030007	2200
	090051	2202	030007	2300	090051	2300	030007	2400
	090051	2400	150017	2420	150018	2440	00EV13	2500
	030007	2500	090051	2500	150019	2520	150020	2520
	030007	2600	090051	2600	090051	2620	150021	2620
	00EV33	2630	00EV12	2640				
	030007	2700	090051	2700	150022	2700	150023	2730
	00EV07	2810						
	150024	2745	150025	2815	150027	2840	150026	2845
	00EV27	2810						
1500 DESCENT - AFD	160001	00	160091	00	090019	00	00EV02	00
	160002	10	00EV08	20				
	160003	42	140032	46	160004	54	160005	55
	160091	60	090019	60	00EV06	110	160006	124
	00EV03	140	160007	149	160039	200	090003	200
	160089	210			00EV03	210	160089	220
	090009	225	160008	220	00EV18	225	030007	230
	140007	230						
	160009	230	160088	245	090009	245	160010	245
	160011	245	160088	250	090009	250	160012	250
	160093	255	090039	255	160013	255	160014	315
	160015	355	160016	401	160017	405	160018	405
	030007	425	160091	455	090019	455	160019	510
	030007	525	160020	540	160021	550	140007	555
1600 APP AND LAND - FFD								
ILS PROCEDURAL								

16EK APP AND LAND
PILOT INCAPACITATED

090003	555	160090	605	030007	625	160022	635
140003	655	160018	655	160023	655	160024	655
160025	655	160093	705	090039	705	160041	705
030007	725	160000	800	160041	805	030007	825
160089	905	090003	905	160041	905	030007	925
090017	915	160091	915				
140023	942	160041	1005	140003	1015	160026	1015
160038	1020	030007	1025	160093	1025	090039	1025
		160039	1030	160040	1040	160027	1055
160042	1100	160028	1103	160041	1105	160029	1113
030007	1125	160042	1200	160041	1205	030007	1225
160090	1225	090017	1225	160089	1255	160089	1255
160042	1300	160089	1305	090003	1305	160030	1305
160041	1305	140007	1315	160031	1315	030007	1325
160091	1325	090019	1325	160042	1400	160032	1405
160033	1405	160041	1405	160088	1425	090009	1425
140007	1430	160034	1430	160035	1430	160043	1435
160091	1440						
090019	1440	160042	1500	160041	1505	160036	1510
160089	1540	090003	1540	160088	1550	090009	1550
160037	1555	160042	1600			160041	1605
160044	1615	160045	1615	160046	1615	160047	1620
160072	1625	160048	1630	160049	1635	160047	1640
160048	1650	160047	1700	160048	1710	160050	1715
160051	1720	160052	1730	160055	1730	160053	1730
160054	1732			160047	1740	160048	1750
160056	1755			160057	1800	160069	1800
160070	1805	160047	1810	030007	1820		
160047	1840	160049	1850	160059	1905	00EV14	1905
160060	1910			160047	1955		
160049	2000	160073	2025	160064	2030		
160065	2030	160066	2030	160058	2030	160067	2046
160068	2056	160071	2130				
160001	0	160002	10	140032	42	160003	42
160004	50	030007	55	160005	55	160006	124
090016	140	090017	140	160007	149	090002	210
090002	220	090003	220	160008	220		
030007	230	160009	230	140007	230		
090009	240	160010	245	160011	245	090002	250
090003	250	160012	250	090038	255	090039	255
160013	255	160014	315	160015	355	160016	401
160017	405	160018	405	030007	425	090018	455
090019	455	160019	510	030007	525	160020	540
140007	555	160021	555	16EK03	615		
16EK00	625						
16EK01	625	16EK02	625	16EK02	635		
16EK15	635			16EK02	645	16EK04	655
16EK05	655	16EK06	655	16EK07	705	16EK08	705
16EK09	715	16EK15	735	030007	740	16EK15	835
030007	840	16EK10	915	16EK15	935	030007	940
16EK06	1015	16EK11	1015	16EK12	1025	160038	1025
16EK60	1030	16EK15	1035	030007	1040	16EK61	1040
16EK09	1055	16EK16	1055	16EK67	1055	16EK13	1100
16EK14	1110	16EK15	1135	030007	1140	16EK16	1155
030007	1240	16EK02	1255	16EK16	1255	16EK02	1305
16EK68	1305	16EK17	1315	16EK18	1315	16EK10	1325
16EK15	1335	030007	1340	16EK16	1355	16EK19	1405
16EK64	1405	16EK20	1425	16EK18	1430	16EK21	1430
160034	1430	16EK15	1435	030007	1440	16EK10	1440
16EK16	1455	16EK22	1505	16EK15	1535	030007	1540

	16EK02	1540	16EK20	1550	16EK23	1555	16EK24	1615
	16EK25	1615	160045	1615	16EK26	1625	16EK16	1655
	16EK69	1715	16EK27	1720	16EK08	1730	16EK28	1730
	16EK29	1730	16EK30	1730	16EK62	1730	16EK15	1735
	030007	1740	16EK08	1755	16EK31	1755	16EK32	1755
	16EK34	1755			030007	1840		
	16EK33	1905	160060	1910	16EK66	1915	16EK35	1930
	16EK15	1935	030007	1940	16EK36	2030	16EK37	2030
	16EK38	2030	16EK39	2046	16EK40	2056	16EK63	2130
16FB	16FB01	00	090016	00	090017	00	16FB02	06
APPROACH TO LAND-	16FB03	06	16FB04	31			16FB05	33
ILS PROCEDURE WITH	16FB06	33	090016	38	090017	38	16FB07	50
GEAR MALFUNCTION	090002	50	090003	50	16FB08	50	030007	50
	16FB09	0117	140003	0117	16FB10	0117	030007	0120
	16FB11	0120	16FB13	0129	16FB12	0138	140007	0138
	030007	0140	090016	0150	090017	0150	16FB14	0150
	16FB15	0150						
1700	160001	0	160092	00	090037	00	160002	10
APP AND LAND	140032	42	160003	42	170001	50	030007	55
MLS PROCEDURAL	170002	55	160011	105	170003	105	160005	115
	170004	115	160028	130	090009	130	160090	140
	090017	140	160006	144			170005	200
	160007	209	140007	210	160090	220	090003	220
	170006	220	170007	245	160019	335	160089	250
	090003	250	160089	300	090003	300	160091	310
	090019	310	030007	355	170008	400	140007	410
	170009	415	160091	425	090019	425	030007	455
	170010	515	160089	525	090003	525	160017	525
	160018	525	170011	525	140003	535	170012	535
	160093	545	090039	545	030007	555	160000	635
	030007	655	160091	745	090019	745	030007	755
	140023	815	160089	845	090003	845	030007	855
	140003	855	170013	855	160091	905	090019	905
	160038	915	170014	915	160047	920	030007	955
	160047	1000	160089	1005	090003	1005	160089	1015
	090003	1015	170015	1015				
	140007	1025	170016	1025	160047	1030	140003	1035
	160091	1045	090019	1045	030007	1055	160047	1100
	140023	1112	170017	1125	160047	1130	170019	1135
	140003	1145	170018	1145	160089	1155	090003	1155
	160018	1155	160025	1155	170020	1155	170021	1202
	160047	1205	170022	1205	030007	1215		
	160047	1230	170023	1255	170024	1255	170031	1255
	160069	1300	160045	1305	160070	1305	170025	1325
	170026	1325			160018	1335	160053	1335
	170027	1335	160060	1345	160018	1355	160057	1355
	170028	1355	160061	1405			170029	1425
	160047	1430			170030	1435	030007	1440
					160047	1500	030007	1510
	160063	1521	160058	1554	160066	1555	160067	1620
	160068	1620	160071	1654	00EV22	1708		
17EK	160001	0	160002	10	140032	42	160003	42
APP AND LAND	170001	50	030007	55	170002	55	160011	105
MLS PROCEDURAL	170003	105	160005	115	170004	115	090016	140
PILOT INCAPIC	090017	140	160006	144			170005	200
	160007	209	140007	210	090016	220	090003	220
	170006	220	170007	245	160019	335	090002	250
	090003	250	090002	300	090003	300	090018	310
	090019	310	030007	355	170008	400	140007	410
	170009	415	090018	425	090019	425	030007	455

170010	515	090002	525	090003	525	160017	525
160018	525	170011	525	140003	535	170012	535
090038	545	090039	545	030007	555	160000	635
16EK09	625	17EK00	625	17EK01	625	030007	655
		16EK12	825	16EK06	855	170013	855
16EK10	905	17EK02	915	160038	920	030007	945
16EK02	1015	17EK18	1015	16EK18	1025	17EK03	1025
16EK06	1035	030007	1045	16EK10	1045	17EK04	1125
17EK19	1135	16EK06	1145	17EK05	1145	16EK02	1155
16EK07	1155	16EK08	1155	17EK06	1155	17EK21	1155
17EK07	1205	17EK08	1255	17EK09	1255	17EK21	1255
16EK34	1300	160045	1305	17EK10	1325	17EK22	1325
		16EK08	1335	16EK29	1335	17EK11	1335
160060	1345	16EK08	1355	16EK32	1355	17EK12	1355
16EK35	1405			17EK13	1425		
17EK14	1435	030007	1455			17EK15	1521
16EK38	1555	17EK16	1610	17EK17	1620	16EK63	1654
090051	00	180002	0	180001	10	00EV13	10
140032	40	160003	40	170004	50	090048	100
180004	105	160005	115	160006	144	090067	205
180005	205	160007	209	180006	215	00EV14	240
160011	255						
180007	255	030007	300	090048	300	180008	305
090048	400	180009	405	030007	430	090051	500
090067	515	180010	515	030007	530	180011	535
160018	555	160025	555	180012	555	090048	600
00EV02	600						
180013	610	180014	615	180015	620	030007	630
00EV14	625						
180016	655	090048	700	030007	730	030007	730
090048	800	140023	805	150020	835	180017	835
180018	835	090048	900	180019	915	180020	925
00EV12	945						
030007	930	090048	1000	030007	1030	090048	1100
00EV03	1045	00EV16	1100				
030007	1130	090048	1200	180021	1225	030007	1230
180039	1235	090048	1300	180022	1320	180023	1320
030007	1345	160039	1350	180024	1350	180025	1425
180033	1435	030007	1500	090051	1500	090067	1515
180026	1515	180027	1515	160045	1535	180028	1535
030007	1600	090048	1600	180029	1635	160069	1640
160053	1645	160018	1645				
180071	1645	180030	1645	180031	1645	030007	1700
160057	1705	160018	1705	180032	1705		
160070	1725	180072	1730				
00EV12	1740	030007	1800				
180072	1800	160059	1825	160060	1830	180072	1830
00EV03	1840						
180034	1835	160062	1855	030007	1900	180072	1900
00EV13	1910						
180072	1930	160095	1955	160064	1955	180071	2000
180035	2010	180036	2020	180038	2050	00EV32	2031
00EV32	2050	180037	2120				
090051	0	180001	0	180002	5	140032	40
160003	40	170004	50	090051	100	180004	105
160005	115	160006	144	090067	205	180005	205
160007	209	180006	215	160011	255	180007	255
030007	300	090051	300	180008	305	090051	400
180009	405	030007	430	090051	500	090067	515

1800 APP AND LAND - AFD
ILS PROCEDURAL

1801 APP AND LAND - AFD
MLS PROCEDURAL

180010	515	030007	530	180011	535	160017	545
160018	545	180050	545	180051	555	030007	600
090051	600	180052	656	030007	700	090051	700
140023	735	030007	800	180053	835	180054	835
180055	840	180056	845	090051	850	180018	850
030007	900	090051	900	170014	935	090067	945
180057	945	030007	1000	090051	1000	140023	1025
180058	1040	180025	1100	180059	1100	160018	1110
160025	1110	180060	1110	090051	1115	160045	1120
180061	1120	090067	1130	180062	1130	090051	1140
030007	1200			160069	1210	180063	1210
180064	1210	160074	1215	160018	1216	160053	1216
180030	1216	180065	1217	160060	1220	090051	1230
160018	1235	160057	1235	180066	1235		
090051	1300	180067	1305	180068	1310	030007	1315
090051	1330	160063	1405			090051	1440
160095	1440	180036	1450	180038	1520	180037	1546
090051	0	180001	0	180002	5	140032	40
160003	40	170004	50	090051	100	180004	105
160005	115	160006	144	090067	205	180005	205
160007	209	180006	215	160011	255	180007	255
030007	300	090051	300	180008	305	090051	400
180009	405	030007	430	090051	500	090067	515
180010	515	030007	530	180011	535	160018	555
160025	555	180012	555	090051	600	180013	610
180014	615	180015	620	030007	630	180016	655
090051	700	030007	730	030007	730	090051	800
140023	805	150020	835	180017	835	180018	835
090051	900	180019	915	180020	925	030007	930
090051	1000	090051	1100	16EK50	1111	18EK00	1111
		16EK51	1225	180021	1225	16EK52	1235
16EK53	1300	16EK53	1310	180022	1320	18EK01	1320
16EK53	1335	030007	1345	180024	1350	16EK51	1350
16EK51	1400	180025	1410	030007	1410	180074	1415
180074	1445	180026	1515	16EK51	1515	16EK54	1515
180028	1525	180074	1525	160045	1555	180074	1600
030007	1630	180073	1635	180074	1645	16EK29	1645
16EK08	1645	030007	1655	180031	1700	16EK32	1700
16EK08	1700	180073	1710	16EK55	1715	16EK34	1720
180074	1725	16EK65	1755	180074	1800	16EK56	1825
160060	1830	18EK02	1835	180074	1840	16EK35	1900
030007	1915	180074	1920	16EK57	1945	16EK58	1948
180073	1950	180035	1950	180073	2000	180036	2010
18EK03	2040	16EK59	2110				
		090051	0	180001	0	180002	5
140032	40	160003	40	170004	50	090051	100
180004	105	160005	115	160006	144	090067	205
180005	205	160007	209	180006	215	160011	255
180007	255	030007	300	090051	300	180008	305
090051	400	180009	405	030007	430	090051	500
090067	515	180010	515	030007	530	180011	535
160017	545	160018	545	180050	545	180051	555
030007	600	090051	600	180052	656	030007	700
090051	700	140023	735	030007	800	180053	835
180054	835	180055	840	180056	845	090051	850
180018	850	030007	900	090051	900	170014	935
090067	945	180057	945	030007	1000	090051	1000
140023	1025	180058	1040	180025	1100	180059	1100
18EK00	1110	180060	1110	16EK53	1110	16EK07	1120
16EK08	1120	180061	1120	180062	1130	16EK51	1130

18EK APP AND LAND - AFD
ILS - PILOT INCP

18XX APP AND LAND - AFD
MLS - PILOT INCP

	16EK50	1135	160045	1150	030007	1200		
	16EK34	1205	180063	1210	18EK04	1210	180030	1216
	16EK29	1216	16EK08	1216	180065	1217	160060	1220
	16EK35	1220	180066	1235	16EK32	1238		
	16EK08	1238	030007	1245	18EK05	1250	180067	1305
	180068	1310	18EK05	1320	18EK05	1350		
	18EK05	1420	16EK58	1432	180036	1450		
	18EK03	1520	16EK59	1550				
2000 SHUTDOWN	200001	0	200002	30	200003	52	200005	142
	200006	200	200007	215	200008	242	200009	304
	200010	337	200011	417	200012	430		
20EK SHUTDOWN- PILOT	20EK01	0	20EK02	32	20EK03	56	20EK05	142
INCAPACITATED	20EK06	214	20EK07	236	20EK08	301	20EK09	341
	20EK10	349						
2300 TAXI - AFTER LANDING	230001	0	00EV10	5	00EV05	100	230002	118
	00EV13	140	230003	127	230004	240	00EV04	320
23EK TAXI - AFTER LANDING	23EK01	0	23EK02	13	23EK03	120	23EK04	240
-PILOT INCAPACITATED								
A9FD NOISE ABATEMENT	090001	0		0	090003	0	00EV18	00
	090004	10	090054	10				
CLIMB - NORMAL AWY-	030007	15	090054	20	090003	20	090005	20
FFD		30	090006	30	090003	32		40
	090003	42	030007	45		50	090003	52
		100	090009	102	090007	103		108
	090003	108	030007	110		118	090009	118
	090010	123		125	090009	125	090003	130
	090009	140	030007	140	090012	142	090011	145
		145	090017	145	090013	152	090021	155
	090014	205		215	090019	215	030007	230
	030007	300		315	090003	315	090015	315
		325	090003	325	090020	335	090003	335
		355	030007	355		405	090019	405
	090023	410	090024	500		505	090019	505
	030007	510		605	090019	605	030007	605
	090025	650		705	090017	705	090026	707
	140023	707	030007	710		735	090003	735
		745	090009	745	090027	750		750
	090019	750	030007	755		850	090019	850
	030007	850	030007	945		950	090019	950
		1050	090017	1050	030007	1100		1120
	090017	1120	090028	1140		1150	090019	1150
		1250	090019	1250	090029	1310		1350
	090017	1350	030007	1410	090030	1430		1430
	090019	1430	030007	1455	030007	1515		1530
	090019	1530	030007	1555		1630	090017	1630
	00EV09	1640						
	090031	1645	090032	1700	140023	1705	030007	1710
		1705	090017	1705	090033	1715		1735
	00EV15	1740	090009	1735	090034	1740	090035	1800
		1805	090037	1805	030007	1825	030007	1925
	090037	1935	030007	2025	090039	2105	030007	2125
	030007	2225	00EV05	2245		2305	090039	2305
	00EV05	2245						
	090040	2305	030007	2330	00EV12	2330		2505
	030007	2425						
	00EV03	2425	00EV15	2435				
	090019	2505	030007	2525	030007	2625	090041	2605
		2610	090017	2610		2640	090003	2640
	090042	2650		2650	090003	2650		2700
	090003	2700	090043	2700	090044	2710		2720

	090039	2720	030007	2825	090045	2845		2920
	00EV01	2935						
	090003	2920	030007	2925		2930	090003	2930
	00EV03	2930		2940	090009	2940		
11FD CRUISE - NORMAL AWY	110001	0 0 0		0	090039	0	110002	0
	00EV17	00	030007	40	110003	140	030007	140
	030007	240	090037	200	090037	330		
		500	090039	500	110004	625		700
	090039	700	00EV12	820	110005	845	110006	900
	110007	905						
		910	090039	910	030007	340	030007	440
	030007	540	030007	640	030007	740	030007	840
	110008	930	030007	950	00EV14	1015	030007	1040
		1110						
	090039	1110	030007	1140	110009	1150	030007	1240
		1310	090003	1310	110010	1320		1320
14FD DESCENT - FFD	090003	1320		1330	090009	1330		
				00EV15	00	140001		0
	140002	0	140003	0		10	090039	10
	030007	26	030007	135		210	090009	210
	140003	215	140004	215		225	090019	225
	030007	235	140005	305	140006	325	140007	325
	030007	335		335	090003	335	030007	435
	00EV12	500						
		345	090039	345	140008	447	030007	535
	140007	545	140009	545		555	090037	555
	00EV04	600						
	140010	605	140011	615	030007	635	00EV17	635
	030007	725	090037	725	140012	745		
	030007	835	090039	855	030007	935	030007	1035
		1055	090003	1055	140013	1055	140003	1105
	140014	1105		1115	090037	1115	030007	1135
	030007	1235	090037	1245	030007	1335		
	090039	1415	030007	1435	030007	1535		
		1615	090019	1615	030007	1635		1715
	090017	1715	030007	1735		1745	090009	1745
		1750	090037	1750	140015	1750	140016	1750
	140017	1811	140018	1831	140032	1838	030007	1840
	090037	1920	030007	1935	030007	2035	090039	2050
	030007	2135	030007	2235	00EV03	2235		
	00EV03	2235						
	140019	2240	140020	2245		2250	090019	2250
	00EV18	2305						
	140022	2255	140023	2256	140021	2310	030007	2335
	140003	2350	140024	2350			110012	2400
	140025	2405	030007	2435	140026	2510		
	030007	2535						
	030007	2635	030007	2735	030007	2835	14HLDG	2845
	030007	2935	030007	3035	030007	3135	030007	3235
	00EV16	3240	030007	3335				
	090017	3345	140028	3405	140003	3420	140029	3420
		3430	090039	3430	030007	3435	030007	3535
		3630	090039	3630	030007	3635	030007	3735
	140023	3805	160000	3815		3830	090017	3830
		3900	090003	3900	140003	3910	140030	3910
		3920	090003	3920	140031	3930	030007	3935
		3930	090003	3930				
16FD APP AND LAND - FFD	160001	00		00	16AF06	00	00EV02	00
	160002	10	00EV08	20				
ILS PROCEDURAL	160003	42	140032	46	160004	54	160005	55

00EV03	60	16AF06	60	00EV06	110	160006	124
	140	160007	149		200	16AF04	200
	210			00EV03	210		220
090009	225	160008	220	00EV18	225	030007	230
140007	230						
160009	230	16AF04	240	160010	245		
160011	245			160012	250		
16AF06	255	160013	255	160014	315	16AF06	355
160015	355	160016	401	160017	405	160018	405
030007	425		455	16AF06	455	160019	510
030007	525	160020	540	160021	550	140007	555
		16AF05	605	030007	625	160022	635
16AF04	635	16AF04	645				
140003	655	160018	655	160023	655	160024	655
160025	655	16AF06	705	160041	705		
030007	725	160000	800	160041	805	16AF06	805
030007	825	16AF04	905	160041	905	030007	925
16AF06	915						
140023	942	160041	1005	140003	1015	160026	1015
160038	1020	030007	1025	16AF06	1025		
		160039	1030	160040	1040	160027	1055
160042	1100	160028	1103	160041	1105	160029	1113
030007	1125	16AF06	1125	160042	1200	160041	1205
16AF05	1225	030007	1225				
160042	1300			16AF04	1305	160030	1305
160041	1305	140007	1315	160031	1315	030007	1325
	1325	16AF06	1325	160042	1400	160032	1405
160033	1405	160041	1405	090009	1425		
140007	1430	160034	1430	160035	1430	160043	1435
16AF06	1440	160042	1500	160041	1505	160036	1510
16AF04	1540	16AF04	1550				
160037	1555	160042	1600			160041	1605
160044	1615	160045	1615	16AF01	1615	160047	1620
16AF03	1620	160048	1630	160049	1635	160047	1640
160048	1650	160047	1700	160048	1710	160050	1715
160051	1720	160052	1730	160055	1730	160053	1730
160054	1732			160047	1740	160048	1750
160056	1755			160057	1800	160069	1800
160070	1805	160047	1810	030007	1820		
160047	1840	160049	1850	160059	1905	00EV14	1905
160060	1910			160047	1955		
160049	2000	16AF02	2020	160064	2030		
160065	2030	160066	2030	160058	2030	160067	2046
160068	2056	160071	2130	00EV22	2146		
SYD132	00	170031	00	180007	00	180073	00
180074	10						
160033	00	SYD133	23	180008	38	160011	38
180050	48	160017	48	160018	48	180073	100
180060	108	160018	108	160025	108	180054	125
180055	135	180056	145	SYD134	221	180074	200
180073	150	180073	230				
180074	240	SYD135	258	170031	300	180074	310
180074	340	160053	405				
160018	405	180073	420	SYA131	423	160069	425
160060	430	160076	430	180073	440	180073	450
180018	500	160057	500	160018	500	180074	510
SYA132	523	160					

	160058	712	090049	720	180073	740	160067	742
	160068	747						
SIM2 CURVED 180 DEG AUTO	SYD132	00	180071	00	180007	00	180073	00
APP TO LAND ROLL	160033	00	SYD133	28	180071	30	180008	38
WINGS LEVEL 1.5 MI	160011	38	180050	48	160017	48		
FROM TD	160018	48	180071	100	160025	108	160018	108
	180054	125	180071	130	180055	135	180056	145
	180074	150	180039	200	180070	210	180070	220
	180074	220	SYD134	221	180071	230	180074	250
	SYD135	258	180071	300	180074	320	180071	330
	180074	350	180071	400	160053	405	160018	405
	180018	420	SYA131	423	160069	425	160060	430
	160076	430	180070	432	180073	440	180071	442
	180073	450	180068	500	160057	500	160018	500
	180071	512	180073	520	SYA132	523	160054	530
	160045	535	180074	540	180071	542	00EV14	542
	180074	610	180071	612	180074	640	180071	642
	180074	710	SYSFAF	712	180070	712	160058	712
	00EV42	722	180073	740	160067	742	160068	747
SIM3 180 CURVED MAN APP/	SYD132	00	170034	00	180007	00	160011	00
LAND- ROLL OUT AT	160015	06	160016	06	180073	10	180073	20
THRESHOLD	180050	26	160017	26	160018	26	160061	32
	180073	40	160020	46				
	180073	50	180073	100	170034	100	180060	106
	160065	106						
	160018	106	160069	106	SYD135	112	180054	112
	180055	122	180056	132	160050	142	160060	145
	180073	150	090002	200	180039	202	160053	202
	160018	202	170032	210				
	180074	210	170033	240	180074	240	170033	250
	170031	300	180074	310				
	180074	340	180074	410	160056	419	180066	439
	160057	439	160018	439	160076	445	180074	450
	SYA132	506	180074	520	160054	524	00EV12	524
	170032	600	160058	627	00EV43	627	090002	630
	160067	632	160068	637				
SIM4 180 CURVED AUTO APP/	SYD132	00	180071	00	180007	00	160011	00
LAND- ROLL OUT AT	180073	10	180029	06	180050	26	160017	26
THRESHOLD	160018	26	180071	30	180031	30	180029	32
	180073	40	180029	46	180073	50	180071	100
	180073	100	180060	106	160025	106	160018	106
	160069	106						
	SYD135	112	180033	112	180054	112		
	180070	120	180055	122	180056	132	180040	135
	180073	140	180029	142	160060	145	180073	150
	180075	150	160053	202	160018	202		
	180074	210	180074	240	180074	310	180074	340
	180074	410	180029	419	180066	439		
	160057	439	160018	439	160076	445	180074	450
	180071	450	180074	520	SYA132	506	180071	520
	160054	524	00EV12	530	180074	550	180070	550
	180070	600	180072	610	180030	620	160058	627
	160065	629	160067	632	160068	637		
DUMY DUMMY PHASE	DUMMY	0						

EVENT/PROCEDURE													
00XX01	MASTER CAUTION WARN	7A	24	0	10	*1	7A	25	.73	10	P1		
	LIGHT PROCEDURE	7A	37	2.9	10	P1				10			
00XX02	CHECKLIST RETRIEVAL	1PXXXX01		0	10	P1	1P	02	0		10CP1		
	PROCEDURE	8B	02	1.5	10CP2	8B	05		7.4		10CP2		
00XX03	CHECKLIST COMPLETE	1PXXXX02		0	10CP1	1P	06		0		10 P3		
	PROCEDURE	1P	03	1	10	P1	8B	08	1.5		10CP1		
00BA01	READ AND DO C/L FUEL	1P00BA01		0	10	P1	1P	07	0		10CP3		
	HEAT VALVE FAILURE	1P00BA02		2.3	10CP1	1P	17		2.3		10 P4		
		7F	09	4.3	10CP1	7F	10		4.3		10CP1		
		1P00BA03		6.4	10CP1	1P	02		6.4		10 P1		
00BB01	READ AND DO C/L MIN	1P00BB01		0	10	P1	1P	02	0		10CP1		
	FUEL GO-AROUND	1P00BB02		1.5	10CP1	1P	02		1.5		10 P1		
		1P00BB03		3	10CP1	1P	06		3		10CP3		
		7C	24	4	10	P2	7C	26	6.4		10 P1		
		7C	30	7.8	10	P2	7C	35	9.4		10 P2		
		7C	38	10.8	10	P1	7C	42	12.2		10 P2		
		1P00BB04		13.7	10	P1	1P	06	13.7		10CP3		
		1P00BB05		14.7	10CP1	1P	02		14.7		10 P2		
		7C	16	16.7	10	P2	1P00BB06		18.7		10 P1		
		1P00BB07		19.2	10CP1	1P	07		19.2		10 P3		
		1P00BB08		21.5	10	P1	1P	06	21.5		10CP1		
00BC01	READ AND DO C/L FUEL	7C	47	0	10CP1	1P00BC01			1		10CP1		
	FILTER ICING	1P	02	1	10	P1	1P00BC02		2.5		10 P1		
		1P	06	2.5	10CP3	7C	18		3.5		10 P1		
		7C	50	5.5	10	P2	7C	51	6.0		10 P2		
		1PXXXX05		6.0	10	P1					10		
		7F	09	7.7	10	P1	7F	10	7.7		10 P1		
00BD01	MONITOR FUEL GAGES,	7C	11	0	10	P3	7C	09	0		10 P3		
	IDENTIFY FUEL XFR	7C	10	0	10	P3	1P00BD01		3		10 P1		
	PROBLEM	1P	04	3	10CP1						10		
00BD02	READ AND DO C/L FUEL	1P00BD02		0	10CP1	1P	12		0		10 P1		
	XFR PROBLEM	1P00BD03		2.5	10CP1	1P	14		2.5		10 P3		
		7C	17	4.1	10	*2	7C	13	6.1		10 P1		
		7C	31	6.7	10	P3	7C	35	9.1		10 P2		
		1PXXXX04		10.4	10	P1	1P	11	10.4		10CP1		
		1P00BD04		10.9	10CP1	1P	04		10.9		10 P2		
		7C	24	13.1	10	P1	1PXXXX05		14.6		10 P1		
		1P	11	14.6	10CP1	1P00BD05			15.1		10CP1		
		1P	13	15.1	10	P2	1P00BD06		17.5		10 P1		
		1P	12	17.5	10CP1	1P00BD07			20.1		10CP1		
		1P	09	20.1	10	P1	7C	30	21.4		10 P1		
		7C	34	23.0	10	P1	1PXXXX05		24.4		10 P1		
		1P	11	24.4	10CP1	1P00BD08			24.9		10CP1		
		1P	09	24.9	10	P2	1P00BD09		26.3		10 P1		
		1P	14	26.3	10CP3						10		
00CB01	READ AND DO C/L CSD	1P00CB01		0	10	P1	1P	02	0		10 P3		
	LOW OIL PRESSURE LT	1P00CB02		3	10CP1	1P	02		3		10 P2		
		7B	09	5	10	P2	7B	10	5		10 P2		
		7B	11	6	10	P2	7B	12	6		10 P2		
		7B	13	7	10	P2	1P00CB03		8		10 P1		
		1P	11	8.5	10CP1	7L	13		9		10 P4		
		7L	01	11.3	10	P1	7L	23	13.4		10 P1		
		7B	24	14.3	10	P1	7B	44	14.9		10 P2		
		7B	25	16.4	10	P1	7B	36	16.4		10 P1		
		1P00CB05		17	10	P1	1P	04	17		10CP3		
		7B	68	18.8	10	P2	7B	72	21		10 P1		
		7B	63	23.6	10	P1					10		
00CD01	READ AND DO C/L	1P00CD01		0	10CP1	1P	02		0		10 P2		
	STDBY PWR OFF LT	1P00CD02		2	10CP1	1P	02		2		10 P1		

	7B	18	3.5	10 P1	7B	15	4.7	10 P1
	7B	19	7.6	10 P2	1P00CD03		7.8	10 P1
	1P	11	7.8	10CP1				10
00CE01 READ AND DO C/L BUS	1P00CE01	0	10 P1	1P	02	0	10CP1	
OFF LT	1P00CE02	1.5	10CP1	1P	06	1.5	10 P3	
	7B	28	2.5	10 P2	7B	38	2.5	10 P2
	7B	34	3.5	10 P1	7B	29	5.5	10 P1
	7B	39	6.1	10 P1	1P00CE03		6.6	10CP1
	1P	06	6.6	10 P1	1P00CE04		9.1	10 P1
	1P	04	9.1	10CP2				10
00CF01 READ AND DO C/L XFR	1P00CF01	0	10CP1	1P	02	0	10 P2	
BUS OFF LT	1P00CF02	2	10CP1	1P	06	2	10 P1	
	7B	26	4.5	10 P2	7B	23	5.5	10 P1
	7B	27	8.3	10 P1	1P00CF03		8.9	10 P1
	1P	06	8.9	10CP3				10
00CG01 READ AND DO C/L	1P00CG01	0	10CP1	1P	06	0	10 P1	
EQUIP COOLING LT OFF	1P00CG02	2.5	10CP1	7B	80	3.5	10CP1	
	7B	79	5.2	10CP1	7B	81	6.3	10CP1
	1P00CG03	6.3	10CP1	1P	02	8.5	10 P1	
00DA01 READ AND DO C/L HYD	1P00DA01	0	10CP1	1P	02	0	10 P2	
SYS A LOSS	1P00DA02	2	10CP1	1P	02	2	10 P3	
	4A	19	5	10 P1	4A	07	6.05	10 P1
	4A	03	6.71	10 P1	1P00DA03		10.04	10 P1
	1P	02	10.04	10 P2	4A	08	12	10 P3
	1P00DA04	12	10CP1	1P	02	12.9	10 P2	
	7A	09	14.9	10CP1	7A	02	15.45	10CP4
	7A	10	18.2	10CP1	7A	37	18.8	10CP1
	7A	04	21.0	10CP3	7A	38	22.46	10CP1
	1P00DA05	23.01	10CP1	1P	02	23.01	10 P3	
	4H	06	24.4	10 P1	1P00DA06		26.8	10 P1
	1P	02	26.8	10CP2	7A	21	28.8	10CP1
	7A	19	30.9	10CP2	7A	20	32.9	10CP1
	1P00DA07	34.9	10CP1	1P	17	34.9	10 P1	
	1P00DA08	38.4	10CP1	1P	17	38.4	10 P1	
	1P00DA09	41.9	10CP1	1P	17	41.9	10 P1	
	1P00DA10	45.4	10 P1	1P	17	45.4	10CP1	
	1P00DA11	49.4	10 P1	1P	07	49.4	10CP1	
00FA01 READ AND DO C/L GEAR	4D	55	0	10CP1	1P00FA01		1	10 P1
NOT SEALED LT	1P	02	1	10CP2	1P00FA02		10.0	10CP1
	1P	06	10.0	10 P1	1P00FA03		12.5	10CP1
	1P	02	12.5	10 P2	4D	54	14.5	10CP1
	4D	56	17.4	10CP1				10
00FC01 READ AND DO C/L SYS	7A	19	0	10CP2	1P00FC01		0	10CP1
A/B BRAKE PRESS LOSS	1P	02	0	10 P2	1P00FC02		10.0	10CP1
	1P	02	10.0	10 P2	1P00FC03		12.0	10CP1
	1P	02	12.0	10 P1	4D	41	13.5	10CP1
	1P00FC04	16.1	10CP1	1P	03	18.1	10 P1	
00FG01 READ AND DO C/L ANTI	4D	37	0	10CP1	1P00FG01		.6	10CP1
-SKID INOP LT	1P	02	.6	10 P2	1P00FG02		10.6	10CP1
	1P00FG03	13.1	10CP1	1P	17	10.6	10 P3	
	4D	41	14.6	10CP1	1P00FG04		17.1	10CP1
	1P	17	17.1	10 P3	1P	03	21.1	10 P1
	1P00FG05	21.6	10CP1	1P	02	21.6	10 P1	
	1P	03	23.1	10 P1				10
00FF01 READ AND DO C/L AUTO	4D	39	0	10CP1	1P00FF01		.6	10CP1
BRAKE INOP	1P	02	.6	10 P2	1P00FF02		10.6	10CP1
	1P	02	10.6	10 P2	1P00FG03		12.6	10CP1
	1P	02	12.6	10 P2	4D	41	14.6	10CP1
00GA01 READ AND DO C/L DUCT	1P00GA01	0	10CP1	1P	02	0	10 P2	
OVERHEAT LT	1P00GA02	2	10CP1	1P	02	2	10 P2	

	7D	29	4	10CP1	7D	41	5.88	10CP1
	7D	43	9.09	10CP1	7D	44	11.78	10CP1
	7D	47	13.85	10CP2				10
00GA02 DUCT TEMP INCR OR				10				10
MIX VALUE MOVES TO				10				10
HOT				10				10
00GA03 READ AND DO C/L DUCT	1P00GA03	0		10CP1	1P	02	0	10 P2
OVHRT FOR EVENT GA02	7D 56	2		10CP1	7D	43	5.23	10CP1
	7D 44	7.30		10CP1				10
00GB01 READ AND DO C/L PACK	1P00GB01	0		10CP1	1P	02	0	10 P1
TRIP OFF LT	1P00GB02	1.5		10CP1	1P	02	1.5	10 P1
	7D 42	3.0		10CP1	7D	53	6.21	10CP2
	7D 43	8.33		10CP3	7D	44	9.33	10CP1
	1P00GB03	11.40		10CP1	1P	02	11.40	10 P2
	7D 29	13.40		10CP1	7D	22	15.28	10CP1
00GC01 READ AND DO C/L WING	1P00GC01	0		10CP1	1P	02	0	10 P2
-BODY OVHRT LT	1P00GC02	2		10CP1	1P	06	2	10 P1
	7D 31	4.5		10CP2	7D	41	6.35	10CP2
	7D 43	9.56		10CP3	1P00GC03		10.56	10CP1
	1P 02	10.56		10 P1	7D	28	12.06	10CP1
	7D 22	14.66		10CP1				10
00GD01 READ AND DO C/L	1P00GD01	0		10CP	1P	02	0	10 P1
BLEED TRIP OFF LT	1P00GD02	1.5		10CP	1P	02	1.5	10 P2
	7D 29	3.5		10CP	7D	26	5.38	10CP1
00GE01 READ AND DO C/L AUTO	1P00GE01	0		10CP1	1P	02	0	10 P1
FAIL LT	1P00GE02	1.5		10CP1	1P	02	1.5	10 P2
	7E 19	3.5		10CP1	7E	23	6.15	10CP1
	7E 27	7.12		10CP1	7E	02	7.78	10CP2
	7E 01	9.83		10CP1				10
00GF01 READ AND DO C/L OFF	1P00GF01	0		10CP1	1P	02	0	10 P2
SCHED DESCENT	1P00GF02	2		10CP1	1P	16	2	10 P3
	3H 02	5		10CP1	7E	09	5.77	10CP1
	7E 10	8.56		10CP1	7E	25	9.76	10CP1
	7E 01	11.06		10CP1				10
00HA01 READ AND DO C/L ANTI	1P00HA01	0		10CP1	1P	17	0	10 P1
-ICE VALVE FAIL OPEN	1P00HA02	3.5		10CP1	1P	07	3.5	10 P1
	3U 01	8		10 *1				10
00JA01 READ AND DO C/L OUTR	1P00JA01	0		10CP1	1P	02	0	10 P1
FFD WINDOW CRACKED	1P00JA02	12		10CP1	1P	02	12	10 P2
	7K 15	14		10CP1	7K	16	14	10CP1
	1P00JA03	15.2		10CP1	1P	07	15.2	10 P1
	1P00JA04	19.7		10CP1	1P	07	19.7	10 P1
	1P00JA05	24.2		10CP1	1P	07	24.2	10 P1
	1P 03	28.7		10 P1	1P00JA06		29.2	10 P1
	1P 02	29.2		10CP2	1P	03	31.2	10CP1
00JB01 READ AND DO C/L	1P00JB01	0		10CP1	1P	02	0	10 P2
WINDOW OVHRT LT ON	1P00JB02	2		10CP1	1P	02	2	10 P2
	7K 15	4		10CP1	7K	16	4	10CP1
	1P00JB03	5.2		10CP1	1P	16	5.2	10 P3
	1P 03	8.2		10 P1				10
00KA01 READ AND DO C/L STAB	1P00KA01	0		10 P1	1P	02	2	10CP2
TRIM RUNAWAY	4G 09	2		10 P2	1P00KA02		12.22	10CP1
	1P 07	12.22		10 P1	1P	03	16.72	10 P1
	1P00KA03	17.22		10CP1	1P	02	17.22	10 P2
	1P 03	19.22		10 P1	1P00KA04		19.72	10CP1
	4G 16	21.72		10 P1	4G	05	26.72	10 P1
00KB01 READ AND DO C/L JAM-	1P00KB01	0		10 P1	1P	17	0	10CP3
MED CNTRLS	1P 03	3.5		10CP1	4A	64	3.5	10 *3
	1P00KB02	18.5		10CP1	1P	16	18.5	10 P3
	1P00KB03	21.5		10CP1	1P	07	21.5	10 P1

00KC01	READ AND DO C/L JAM- MED STAB CNTRL	1P 03 1P00KC01 4G 05 4G 16 4G 02 1P00KC02 4G 17 1P 03 1P 06 1P00KC04 1P00KC05 1P 03 1P00KC07	26 0 .5 4 8.5 21.92 25.92 29.42 29.92 32.92 35.92 40.42 44.92	10 P1 10 P1 1P 17 10 P1 1P 03 10 P1 4G 16 10 P3 4G 02 10CP1 1P 17 10 P1 4G 17 10 P1 1P00KC03 10 P1 1P 03 10CP1 1P 16 10CP1 1P 07 10 P1 1P00KC06 10 P1	10 0 0 4 8.5 21.92 25.92 29.92 32.42 32.92 35.92 40.92 10	10CP3 10CP1 10CP2 10CP2 10 P3 10CP2 10CP1 10 P1 10 P3 10 P1 10CP1 10
00KX01	READ AND DO C/L FOR ABNORMAL CONDITION	1P00KX01 7J 08 7J 02 7J 14 7J 22 7K 11 7J 26 7J 30 7J 34 7J 38 1P00KX03 7E 06 7E 08 1P00KX04 1P00KX05 7M 03 1P00KX06 1P00KX07 1P 03 1P 02 1P 10 1P 02 1P00KX11 1P00K 01 1P00K 02 7A 23 1P00K 03 1P00K 04 4F 02 1P00K 05 1P00K 06 4E 15 1P00K 07 1P00K 08 4D 04 4D 09 1P 02	0 1 5.26 7.59 8.67 13.43 15.99 17.41 17.91 18.41 19.41 21.15 22.31 24.76 26.26 27.26 33.04 33.84 36.34 36.84 38.34 39.34 43.91 0 2.5 3 5.63 6.13 7.13 10.39 11.39 11.89 13.86 15.36 16.36 18.45 19	10CP1 1P 10 10CP2 7J 10 10CP1 7J 12 10 *1 7J 16 10 *1 7K 07 10 *1 7J 24 10CP3 7J 28 10 *2 7J 32 10 *2 7J 36 10 *2 1P00KX02 10CP1 1P 02 10CP1 10CP1 7E 01 10CP1 1P 02 10CP1 1P 02 10 P3 7M 06 10 P1 1P 06 10 P1 1P 06 10 P1 1P00KX08 10 P1 1P00KX09 10CP1 1P00KX10 10 P2 3A 05 10 P1 1P 06 10CP1 1P 06 10CP1 1P 10 10CP1 7A 33 10CP1 1P 06 10CP1 1P 10 10CP4 4E 17 10CP1 1P 02 10CP1 1P 10 10 *1 4D 05 10CP3 1P00K 09 10 P1	0 3.76 7.05 8.13 9.21 14.57 17.41 17.91 18.41 18.91 19.41 10 23.48 24.76 26.26 31.30 33.04 33.84 36.84 38.34 39.34 41.34 43.91 0 2.5 4.93 5.63 6.13 10.39 11.39 12.86 13.86 15.36 18.45 19	10 P1 10CP1 10 *1 10 *1 10CP1 10CP3 10 *2 10 *2 10 *2 10CP1 10 P2 10CP1 10CP1 10 P1 10 P1 10 P4 10CP4 10 P1 10CP1 10 P1 10 *3 10CP1 10 P1 10 P1 10 *1 10 P4 10 P1 10 P2 10CP1 10 P1 10CP1 10CP1 10 P1 10 P1 10 *2 10 P1 10
00K 01	READ AND DO C/L LNDG - FLT CNTRL PROBLEMS	1P00K 01 1P00K 02 7A 23 1P00K 03 1P00K 04 4F 02 1P00K 05 1P00K 06 4E 15 1P00K 07 1P00K 08 4D 04 4D 09 1P 02	0 2.5 3 5.63 6.13 7.13 10.39 11.39 11.89 13.86 15.36 16.36 18.45 19	10CP1 1P 06 10CP1 1P 10 10CP1 7A 33 10CP1 1P 06 10CP1 1P 10 10 P3 4F 07 10 P1 1P 10 10CP1 1P 10 10CP4 4E 17 10CP1 1P 02 10CP1 1P 10 10 *1 4D 05 10CP3 1P00K 09 10 P1	0 2.5 4.93 5.63 6.13 10.39 11.39 12.86 13.86 15.36 18.45 19 0	10 P1 10 P1 10 *1 10 P4 10 P1 10 P2 10CP1 10 P1 10CP1 10 P1 10 *2 10 P1 10
00KD01	FLAP ASYM ADVISORY - LE DEVICES	1P00KD01 1P00KD02	0 2.5	10CP1 1P 06 10 P1 1P 06	0 2.5	10 P1 10CP1
00KL01	FLAP ASYM ADVISORY - TE FLAPS	1P00KL01 1P00KL02 1P00KL03	0 4.5 9	10CP1 1P 07 10 P1 1P 07 10 P1 1P 07	0 4.5 9	10 P1 10 P1 10CP1
00KM01	FLAPS UP LNDG AVDSRY	1P00KM01 1P00KM02 1P00KM03 1P00KM04	0 4.5 8.5 12	10CP1 1P 07 10 P1 1P 19 10CP1 1P 17 10 P1 1P 16	0 4.5 8.5 12	10 P1 10CP1 10 P1 10CP3
00KN01	READ AND DO C/L FLT	1P00KN01	0	10CP1 1P 02	0	10 P2

CNTRL LOW PRESS LT	1P00KN02	2	10CP1	1P	06	2	10	P1
	4A 19	4.5	10	P1	4A 07	5.5	10	P1
	4A 03	6.2	10	P1	1P00KN03	9.6	10	P1
	1P 02	9.6	10	CP1			10	
00KP01 READ AND DO C/L YAW	1P00KP01	0	10CP1	1P	02	0	10	P2
DAMPER LT	1P00KP02	2	10CP1	1P	02	2	10	P2
	4A 14	4	10	P1	4A 54	6.7	10	P1
	4A 13	7.9	10	P1			10	
00KP02 YAW DAMPER DOES NOT	4A 55	0	10	*1	1P00KP03	1.2	10	CP1
RESET	1P 06	1.2	10	P1	4A 14	3.7	10	P1
	1P00KP04	3.7	10	CP1	1P 06	3.7	10	P1
	1P 03	6.4	10	P1			10	
00KQ01 READ AND DO C/L STAB	1P00KQ01	0	10	P1	1P 06	0	10	CP1
OUT OF TRIM LT	4A 76	0	10	P1	4A 02	2	10	P1
	4A 77	2	10	P1	4G 14	5	10	P3
	1P00KQ02	12	10	CP1	1P 02	12	10	P1
	1P00KQ03	13.5	10	CP1	1P 02	13.5	10	P2
	1P 03	15.5	10	P1	1P00KQ04	16	10	CP1
	1P 02	16	10	P1	1P 03	17.5	10	P1
	1P00KQ05	18	10	CP1	1P 06	18	10	P1
	1P 03	21	10	P1			10	
00KR01 READ AND DO C/L SPD	4F 02	0	10	P4	4F 05	2.8	10	P2
BRAKE NOT ARMED	1P00KR01	2.8	10	P1	1P 06	2.8	10	CP1
	4F 01	2.9	10	P1	1P00KR02	13	10	CP1
	1P 06	13	10	P1	1P00KR03	15.5	10	CP1
	1P 16	15.5	10	P3	1P 03	18.5	10	P1
	1P00KR04	19	10	CP1	1P 16	19	10	P3
	1P 03	22	10	P1			10	
00KS01 READ AND DO C/L MACH	1P00KS01	0	10	CP1	1P 02	0	10	P1
TRIM FAIL	1P00KS02	1.5	10	CP1	1P 16	1.5	10	P3
	1P 03	4.5	10	P1	3F 01	5	10	P1
	4B 07	5	10	P2	3F 01	8	10	P1
			10				10	
00EC01 MONITOR SMOKE IN			10				10	
FLT DECK			10				10	
00EC02 ACTION ITEMS FLEC	7B 33	0	10	P1	7B 30	1.72	10	P1
SYS SMOKE/FIRE	7B 43	2.31	10	P1	7B 40	4.03	10	P1
	7B 22	4.62	10	P1	7B 26	7.43	10	P1
	7B 36	8.02	10	P1	7A 25	8.61	10	CP2
	7B 66	10.75	10	P2	7B 72	12.93	10	P2
	7B 63	14.99	10	P1	7B 68	17.05	10	P2
	7B 72	19.23	10	P2	7B 63	21.29	10	P1
			10				10	
00EC03 NOTE SMOKE DECREASE			10				10	
00EC04 SMOKE CONTINUE			10				10	
00EC05 READ/RESPOND PRIMARY	1P00EC01	0	10	CP1	1P 05	0	10	P1
C/L ELEC SMOKE/FIRE	1P00EC02	5	10	CP1	1P 02	5	10	P2
	1P00EC03	7	10	P1	1P 07	7	10	CP1
	1P00EC04	11.5	10	P1	1P 13	11.5	10	CP3
	1P 03	15	10	CP1	1P00EC05	15.5	10	CP1
	1P 02	15.5	10	P2	1PXXXX05	17.5	10	P1
	1P 06	17.5	10	CP4	1P00EC07	18	10	CP1
	1P 05	18.0	10	P1	1P00EC08	23	10	CP1
	1P 16	23	10	P3	1P00EC09	26	10	CP1
	1P 02	26	10	CP3			10	
00EC06 READ/RESPOND PRIMARY	1P00EC10	0	10	CP1	1P 02	0	10	P2
C/L ELEC SMOKE/FIRE	7B 44	2	10	P2	7B 41	3.5	10	P1
	7B 26	4	10	P1	7B 63	4.7	10	P1
	1PXXXX05	6.8	10	P1	1P00EC11	7.2	10	CP1
	1P 05	7.2	10	P2	1P00EC12	13.5	10	P1
	1P 07	13.5	10	CP1			10	
00EC07 READ AND DO C/L -A-	1P00EC12	0	10	CP1	1P 02	0	10	P2

ELEC SMOKE/FIRE	7B	34	1	10 P1	7B	31	3	10 P1
	1P00EC13		3.6	10CP1	1P	02	3.6	10 P2
	7B	43	4.6	10 P1	7B	40	6.32	10 P1
	7B	63	6.91	10 P2	7B	66	7.91	10 P2
	7B	63	10.09	10 P2	1P00EC14		11	10 P1
	1P	02	11	10CP3	1P00EC15		14	10CP1
	1P	07	14	10 P1	1P	03	18.1	10 P1
00EC08 READ AND DO C/L -B-	1P00EC16		0	10CP1	1P	02	0	10 P2
ELEC SMOKE/FIRE	7B	42	2	10 P1	7B	41	3.72	10 P1
	7B	63	4.31	10 P2	7B	66	5.31	10 P2
	7B	63	7.49	10 P2	1PXXXX04		8.49	10 P1
	1P00EC17		8.99	10CP1	1P	02	8.99	10 P2
	7B	31	10.99	10 P1	1PXXXX04		11.28	10 P1
	1P00EC18		11.78	10CP1	1P	02	11.78	10 P1
	1P	03	13.28	10 P1	1P00EC19		13.78	10CP1
	1P	02	13.78	10 P2	7B	16	15.78	10 P1
	7B	18	18.72	10 P2	1PXXXX04		19.31	10 P1
	1P00EC20		19.81	10CP1	1P	02	19.81	10 P1
	7B	55	21.31	10 P1	7B	54	23.37	10 P2
	1PXXXX05		24.37	10 P1	1P00EC21		24.87	10CP1
	1P	02	24.87	10 P2	7B	23	26.87	10 P1
	7B	27	29.68	10 P1	7B	37	30.27	10 P1
	1PXXXX06		30.86	10 P1				10
00EC09 READ ELEC SMOKE/FIRE	1P00EC22		0	10CP1	1P	05	0	10 P3
ADVISORIES	1P00EC23		4	10CP1	1P	05	4	10 P3
	1P00EC24		8	10CP1	1P	06	8	10 P1
	1P00EC25		10.5	10 P1	1P	05	10.5	10CP3
00ED01 PILOT/CO-PILOT MON			10					10
CABIN PRESS DROP			10					10
00ED02 ACTION ITEMS RAPID	7E	20	0	10CP1	7E	28	2.7	10CP1
DEPRESSURIZATION	7E	13	3.3	10CP1	7E	12	5.5	10CP4
	7G	50	6.2	10 P1	7G	51	8.5	10 P1
00ED03 READ/RESPOND C/L	1A	27	0	10CP1	1P00ED01		0	10CP1
RAPID DEPRESSURING	1P	02	0	10 P2	7H	12	2	10 *1
	1A	26	3.5	10 P1	1P	03	4	10 P1
	1A	27	4.5	10CP3	1P00ED02		4.5	10CP1
	1P	02	4.5	10 P2	1P00ED03		6.5	10CP1
	1P	02	6.5	10 P2	7E	23	8.5	10 *1
	1A	26	9.2	10CP3	1P00ED04		9.2	10CP1
	1P	02	9.2	10 P2	7E	12	11.2	10 *4
	1A	26	11.9	10CP3	1P00ED05		11.9	10CP1
	1P	02	11.9	10 P3	7G	51	14.9	10 *1
	1A	27	15.9	10CP3	1P00ED06		15.9	10CP1
	1P	02	15.9	10 P2	1A	28	17.9	10 P1
	1P	03	18.4	10 P1	1A	26	18.9	10CP1
	1P00ED07		18.9	10CP1	1P	02	18.9	10 P3
	1A	26	21.9	10 P1	1P	03	22.4	10 P1
	1A	27	22.9	10CP2	1P00ED08		22.9	10CP1
	1P	13	22.9	10 P3	7E	01	26.4	10 *1
	7E	02	28.9	10 *1	1A	26	31.31	10CP3
	1P00ED09		31.31	10CP1	1P	02	31.31	10 P2
	7H	10	33.31	10 *1	1A	26	34.71	10 P1
	1P	03	34.71	10 P1				10
00EE01 PILOT DECIDES EMERG			10					10
DESCENT REQUIRED			10					10
00EE02 PRIMARY ACTION ITEMS	1G	03	0	10CP1	1G	01	2.32	10 P1
EMERG DESCENT	1A	27	3.73	10CP4	1P00EE01		3.73	10 P1
	7M	03	0	10 P3	7M	06	3.54	10 P4
	4A	29	6.78	10 P1	4B	08	6.78	10 P1
	7E	05	7.73	10CP1	7E	06	7.73	10CP2

	7F	33	7.78	10 P2	7F	34	7.78	10 P2
	4F	03	7.78	10 P1	3A	08	10.77	10 P1
	3A	11	12.77	10 P1	3L	03	12.77	10 P1
	3H	04	12.77	10 P1				10
00EE03 READ/RESPOND C/L	1A	27	0	10CP1	1P00EE02		0	10CP1
EMERG DESCENT	1P	02	0	10 P3	1A	27	3	10CP3
	1P00EE03	3	10CP1	1P	05		3	10 P3
	1A	29	7	10 P4	1P00EE04		7	10 P1
	1P	05	7	10CP3	1A	27	11	10CP2
	1P00EE05	11	10CP1	1P	02		11	10 P1
	1A	27	12.5	10CP2	1P00EE06		12.5	10CP1
	1P	02	12.5	10 P1	1A	27	14	10 *2
	1P00EE07	14	10CP1	1P	02		14	10 P1
	1A	29	15.5	10 P1	1P00EE08		15.5	10CP1
	1P	02	15.5	10 P3	1A	29	18.5	10 P4
	1P00EE09	18.5	10CP1	1A	28		18.5	10 P1
	1A	26	23	10 P1	1P	03	23.5	10 P1
	1A	27	24	10CP3	1P00EE10		24	10CP1
	1P	02	24	10 P2	4F	01	26	10 P1
	1A	27	27.5	10CP2	1P00EE11		27.5	10CP1
	1P	02	27.5	10 P1	7H	10	29	10 *1
	1A	27	30.4	10CP3	1P00EE12		30.4	10CP1
	1P	02	30.4	10 P2				10
00EF01 PRIMARY ACTION ITEMS	7P	39	0	10 *1	7P	47	1	10CP1
FIRE WARN APU	7P	33	2.35	10 P2	7P	34	4.24	10 P3
	7P	27	6.37	10 P1	7L	01	7.58	10 P1
00EF02 READ/RESPOND C/L APU	1P00EF01	0	10CP1	1P	02		0	10 P1
FIRE WARN	7L	17	1.5	10 *1	1P00EF02		2.04	10 P1
	1P00EF03	3.54	10CP1	1P	02		3.54	10 P3
	1P	03	6.54	10 P1	1P00EF04		7.04	10CP1
	1P	07	7.04	10 P1	1P	03	11.54	10 P1
	1P00EF05	12.04	10CP1	1P	05		12.04	10 P3
	1P	03	16.54	10 P1				10
00EG01 PRIMARY ACTION ITEMS	7P	39	0	10 *1	7P	47	1	10 P1
WHEEL WELL FIRE	7P	13	2.35	10 P1	4B	08	3.59	10 P1
	3A	11	6	10 P4	4B	03	22	10 P1
00EG02 ATTAIN GEAR EXT SPD								10
START 160060 6								10
00EG03 READ/RESPOND C/L	1P00EG01	0	10CP1	1P	02		0	10 P1
WHEEL WELL FIRE	1P	03	1.5	10 P1	1P00EG02		2	10CP1
	1P	07	2	10 P1	1P	03	6.5	10 P1
	1P00EG03	7	10CP1	1P	07		7	10 P1
	1P00EG04	11.5	10 P1	1P	05		11.5	10CP3
00XX04 OX MASK/SMOKE GOGGLE	7H	17	0	10 *1	7H	24	4	10 *1
PROC COCKPIT SMOKE	7H	12	8	10 *1	1A	22	12	10 *1
	1F	06	10	10 *3	1A	27	13.5	10CP2
	1PXXXX01	13.5	10CP1	1P	02		13.5	10 P1
	1A	26	15	10 P3	1PXXXX02		15	10 P1
	1P	02	15	10CP1	8E	03	6	10 *1
	7Q	02	6	10 P1				10
00EX01 READ/RESPOND C/L	1A	27	0	10CP4	1P00EX01		0	10CP1
COCKPIT SMOKE	1P	06	0	10 P1	1P00EX02		2.5	10CP1
	1P	02	2.5	10 P1	1P00EX03		4	10CP1
	1P	02	4	10 P1	1P00EX04		5.5	10CP1
	1P	02	5.5	10 P1	1A	26	7	10 P1
	1P	03	7.5	10 P1				10
00EH01 ADVISORY/SECONDARY	1A	27	0	10CP3	1P00EH01		0	10CP1
ITEMS COCKPIT SMOKE,	1P	05	0	10 P3	1A	27	4	10CP3
NO VENTING OR PRESS	1P00EH02	4	10CP1	1P	02		4	10 P2
URIZATION	1A	28	6	10 P1	1P	03	6.0	10 P1

	4B	08	7	10 P1	7F	25	7	10 P4	
	7F	30	7	10 P3	7F	21	7.44	10 P3	
	7F	22	7.44	10 P3	7F	33	7.88	10 P2	
	7F	34	7.88	10 P2	3A	10	8.32	10 P1	
	1A	27	38.32	10 P2	1P00EH03		38.32	10 P1	
	1P	02	38.32	10CP1	1A	29	39.32	10CP3	
00EH02	1P00EH04		39.32	10CP1	1P	02	39.32	10 P2	
ADVISORY/SECONDARY	1P00EH05		0	10CP1	7E	19	2.5	10CP1	
ITEMS COCKPIT SMOKE	1P00EH06		5	10CP1	7E	09	9	10CP1	
NORMAL VENTILATION	7E	01	11.79	10CP2	1P00EH07		12.50	10CP1	
	7E	11	15.50	10CP1	7E	37	17.63	10CP1	
	1P00EH08		18.40	10CP1	7D	10	20.40	10CP1	
	7D	22	21.40	10CP1	1PXXXX04		21.90	10CP1	
	1PXXXX04		23.40	10CP1	7D	13	25.40	10CP1	
	7D	26	25.40	10CP1	1PXXXX04		26	10CP1	
	1P00EH09		27	10 P1	1P	05	27	10 P3	
	4B	03	31	10 P1	7F	27	33.34	10 P2	
	7F	29	33.34	10 P2	1PXXXX06		34.10	10 P1	
	1P00EH10		34.60	10CP1	1P	06	34.60	10 P1	
	1P	03	37.10	10 P1			10		
00IV01	COPILOT MONITOR	2K	56	0	10CP1	1P00IV01	5	10CP1	
	TRAFFIC SITUATION	1P	02	5	10 P1	1P	03	7	10 P1
00IV02	COPILOT MONITOR	2K	56	0	10CP2	1P00IV01	5	10CP1	
	TRAFFIC SITUATION	1P	02	5	10 P1	1P	03	7	10 P1
00IV03	COPILOT MONITOR	2K	56	0	10CP3	1P00IV01	5	10CP1	
	TRAFFIC SITUATION	1P	02	5	10 P1	1P	03	7	10 P1
00IV04	COPILOT MONITOR	2K	56	0	10CP4	1P00IV01	5	10CP1	
	TRAFFIC SITUATION	1P	02	5	10 P1	1P	03	7	10 P1
00IV05	COPILOT MONITOR	2K	57	0	10CP1	1P00IV01	5	10CP1	
	TRAFFIC SITUATION	1P	02	5	10 P1	1P	03	7	10 P1
00IV06	COPILOT MONITOR	2K	57	0	10CP2	1P00IV01	5	10CP1	
	TRAFFIC SITUATION	1P	02	5	10 P1	1P	03	7	10 P1
00IV07	COPILOT MONITOR	2K	57	0	10CP3	1P00IV01	5	10CP1	
	TRAFFIC SITUATION	1P	02	5	10 P1	1P	03	7	10 P1
00IV08	COPILOT MONITOR	2K	57	0	10CP4	1P00IV01	5	10CP1	
	TRAFFIC SITUATION	1P	02	5	10 P1	1P	03	7	10 P1
00IV09	COPILOT MONITOR	2K	58	0	10CP1	1P00IV01	5	10CP1	
	TRAFFIC SITUATION	1P	02	5	10 P1	1P	03	7	10 P1
00IV10	COPILOT MONITOR	2K	58	0	10CP2	1P00IV01	5	10CP1	
	TRAFFIC SITUATION	1P	02	5	10 P1	1P	03	7	10 P1
00IV11	COPILOT MONITOR	2K	58	0	10CP3	1P00IV01	5	10CP1	
	TRAFFIC SITUATION	1P	02	5	10 P1	1P	03	7	10 P1
00IV12	COPILOT MONITOR	2K	58	0	10CP4	1P00IV01	5	10CP1	
	TRAFFIC SITUATION	1P	02	5	10 P1	1P	03	7	10 P1
00EV01	C/P EXT VIS SCAN	8A	10	0	10CP1			10	
00EV02	C/P EXT VIS SCAN	8A	10	0	10CP2			10	
00EV03	C/P EXT VIS SCAN	8A	10	0	10CP3			10	
00EV04	C/P EXT VIS SCAN	8A	10	0	10CP4			10	
00EV05	C/P EXT VIS SCAN	8A	11	0	10CP1			10	
00EV06	C/P EXT VIS SCAN	8A	11	0	10CP2			10	
00EV07	C/P EXT VIS SCAN	8A	11	0	10CP3			10	
00EV08	C/P EXT VIS SCAN	8A	11	0	10CP4			10	
00EV09	C/P EXT VIS SCAN	8A	12	0	10CP1			10	
00EV10	C/P EXT VIS SCAN	8A	12	0	10CP2			10	
00EV11	C/P EXT VIS SCAN	8A	12	0	10CP3			10	
00EV12	C/P EXT VIS SCAN	8A	12	0	10CP4			10	
00EV13	C/P EXT VIS SCAN	8A	13	0	10CP1			10	
00EV14	C/P EXT VIS SCAN	8A	13	0	10CP2			10	
00EV15	C/P EXT VIS SCAN	8A	13	0	10CP3			10	
00EV16	C/P EXT VIS SCAN	8A	13	0	10CP4			10	

00EV17	C/P EXT VIS SCAN	8A	14	0	10CP1			10
00EV18	C/P EXT VIS SCAN	8A	14	0	10CP2			10
00EV19	C/P EXT VIS SCAN	8A	14	0	10CP3			10
00EV20	C/P EXT VIS SCAN	8A	14	0	10CP4			10
00EV21	PILOT EXT VIS SCAN	8A	10	0	10 P1			10
00EV22	PILOT EXT VIS SCAN	8A	10	0	10 P2			10
00EV23	PILOT EXT VIS SCAN	8A	10	0	10 P3			10
00EV24	PILOT EXT VIS SCAN	8A	10	0	10 P4			10
00EV25	PILOT EXT VIS SCAN	8A	11	0	10 P1			10
00EV26	PILOT EXT VIS SCAN	8A	11	0	10 P2			10
00EV27	PILOT EXT VIS SCAN	8A	11	0	10 P3			10
00EV28	PILOT EXT VIS SCAN	8A	11	0	10 P4			10
00EV29	PILOT EXT VIS SCAN	8A	12	0	10 P1			10
00EV30	PILOT EXT VIS SCAN	8A	12	0	10 P2			10
00EV31	PILOT EXT VIS SCAN	8A	12	0	10 P3			10
00EV32	PILOT EXT VIS SCAN	8A	12	0	10 P4			10
00EV33	PILOT EXT VIS SCAN	8A	13	0	10 P1			10
00EV34	PILOT EXT VIS SCAN	8A	13	0	10 P2			10
00EV35	PILOT EXT VIS SCAN	8A	13	0	10 P3			10
00EV36	PILOT EXT VIS SCAN	8A	13	0	10 P4			10
00EV37	PILOT EXT VIS SCAN	8A	14	0	10 P1			10
00EV38	PILOT EXT VIS SCAN	8A	14	0	10 P2			10
00EV39	PILOT EXT VIS SCAN	8A	14	0	10 P3			10
00EV40	PILOT EXT VIS SCAN	8A	14	0	10 P4			10
00EV41	TDZ VIS LAND SCAN	8A	15	0	10 P1			10
00EV42	TDZ VIS LAND SCAN	8A	15	0	10 P2			10
00EV43	TDZ VIS LAND SCAN	8A	15	0	10 P3			10
SYD132	CROSS WPT DD132				10			10
SYD133	CROSS WPT DD133				10			10
SYD134	CROSS WPT DD134				10			10
SYD135	CROSS WPT DD135				10			10
	BEGIN 3 DEG DESCENT				10			10
SYA131	CROSS WPT AC131				10			10
SYA132	CROSS WPT AC132				10			10
SYSFAF	CROSS FINAL FIX				10			10
010001	COCKPIT SAFETY	4C	22	0	10 P1 7B	84	2.18	10 P1
	INSPECTION	7B	57	3.08	10 P2 7B	53	5.16	10 P1
		7B	52	7.22	10 P1 7A	29	12	10 P1
		4D	47	14	10 P1 4D	05	15	10 P2
		4D	09	15.54	10 P3 6A	17	18	10 P1
		4E	16	20.17	10 P1 7P	48	22.67	10 P1
		7P	49	23.57	10 P1 7P	09	25.19	10 P2
		7P	05	25.73	10 P2 7P	08	26.27	10 P2
		7P	50	26.81	10 P2 7P	10	27.35	10 P1
		7P	46	27.89	10 P1 7P	15	28.43	10 P2
		7P	21	31.03	10 P2 7P	22	31.62	10 P2
		7P	52	32.16	10 P1 7P	40	32.66	10 P1
		7P	11	35	10 P1 7P	12	36.63	10 P1
		7L	19	40	10 P1 7L	13	50	10 P1
		7B	24	55	10 P1 7B	34	56	10 P1
		7B	44	57.98	10 P2 7B	25	58	10 P1
		8D	01	1 5	10 P1 7H	19	1 15	10 P1
		8D	02	1 23	10 P1 7H	20	1 30	10 P1
		7B	85	1 35	10 P1 7B	86	1 40	10 P2
		3F	03	1 45	10 P2 3F	02	145.69	10 P1
		4A	41	1 50	10 P2 4A	43	152.16	10 P2
		4A	38	152.48	10 P1 4A	61	153.48	10 P1
		4A	40	155.49	10 P2 7H	06	2 0	10 P1
		7H	21	203.50	10 P1 7K	11	2 7	10 P1
		8D	03	2 10	10 P1			10

010002	PILOT SEATED	8C	03	0	10	P1			10
010003	CO-PILOT SEATED	8C	03	0	10	CP1	8C	02	3
		4A	46	17	10	CP1			10
010004	BEFORE START PROC -1	8B	01	0	10	P1	8B	08	20
	-LIGHTS/SEATS/PEDAL	7G	31	25	10	P2	7G	46	25
		8C	02	40	10	P1			10
		4A	46	53	10	P1			10
010005	BEFORE START PROC -2	7H	17	0	10	P1	7H	14	5
	-OXYGEN SYS	7H	11	6.4	10	P1	7H	22	7.8
		7H	10	11.80	10	P1	7H	23	13.2
		7H	13	17.2	10	P1	7H	12	18.6
		7H	24	20.1	10	P1	7H	11	25
		7H	24	26.4	10	P1	7H	12	30.4
		7H	08	32	10	P1	7H	25	33.3
		7H	09	37.3	10	P1	1A	22	42
		1F	06	44.35	10	P3	7H	18	50
		8D	04	55	10	P1	8E	01	57
		8E	02	59	10	P1			10
010007	BEFORE START PROC -3	4A	48	0	10	P1	4A	49	2.79
	-FLIGHT CONTROL SYS	4A	50	4.81	10	P1	4A	51	6.85
		4A	52	8.89	10	P1	4A	53	10.91
010008	BEFORE START PROC -4	7C	67	0	10	P1	7C	68	1.14
	-FUEL SYS	7C	49	1.97	10	P1	7C	57	2.52
		7C	69	3.07	10	P1	7C	13	3.88
		7C	24	4.43	10	P1	7C	26	5.88
		7C	30	7.33	10	P1	7C	34	8.78
		7C	38	10.23	10	P1	7C	42	11.68
010009	BEFORE START PROC -5	7B	57	0	10	P2	7B	67	2.18
	-ELECTRICAL SYS	7B	70	4.36	10	P1	7B	17	4.92
		7B	88	6.88	10	P1	7B	89	8.21
		7B	90	9.01	10	P1	7B	91	10.40
010010	BEFORE START PROC -6	7G	07	0	10	P3	7G	09	2.73
	-LIGHTS	7B	92	4.23	10	P1	7G	35	5.58
		7G	38	7.48	10	P1	7G	02	8.02
		7G	05	9.82	10	P1	7K	10	11.53
010011	BEFORE START PROC -7	7K	07	0	10	P1	7K	11	4.22
	-ANTI-ICE / HEAT	7J	24	5.36	10	P3	7J	26	6.78
		7J	09	8.20	10	P4	7J	11	9.70
		7J	05	11.20	10	P2	7J	07	11.73
		7J	13	12.26	10	P1	7J	15	12.80
		7J	17	13.34	10	P1	7J	19	13.34
010012	BEFORE START PROC -8	7A	01	0	10	P4	7A	03	1.46
	-HYDRAULIC SYS	7A	09	2.92	10	P1	7A	11	3.47
		7A	05	4.02	10	P3	7A	07	5.48
		7A	12	6.94	10	P1	7A	14	7.49
		7A	19	8.04	10	P1	7A	20	10.28
		7A	21	12.52	10	P1			10
010013	BEFORE START PROC -9	7E	01	0	10	P1	7E	02	1.27
	-PRESSURIZATION/AIR-	7D	41	3.32	10	P2	7D	43	6.53
	CONDITIONING	7D	50	9.22	10	P3	7D	54	11.34
		7D	02	15	10	P2	7D	01	17.70
		7D	05	20	10	P3	7D	19	21.52
		7D	63	23.04	10	P1	7D	64	24.39
		7D	65	25.70	10	P1	7D	66	26.47
		7E	05	30	10	P1	7E	06	32.50
		7E	07	33	10	P2	7E	08	33.93
		7E	11	36	10	P2	7E	09	39
		7E	10	40.62	10	P1	7E	16	42
		7E	18	44.69	10	P2			10
010014	BEFORE START PROC-10	7G	24	0	10	P2	7M	12	1.5

	-LIGHTS/ENG START/	7M	13	3.5	10 P2 3R	47	5	10 P1
	FLIGHT DIREC	3R	48	6.5	10 P2 3V	19	7.48	10 P1
010015	BEFORE START PROC-11	5K	01	0	10 P1 5K	02	3.5	10 P1
	-COMPASS/ADF/RMI/CI	5K	03	5	10 P2 1P010001	01	5	10 P1
		1P	06	5	10CP1 1P	03	7.5	10CP1
		5D	23	6.75	10 P1 5E	21	9	10CP1
		5G	03	8.98	10 P1 5H	01	11.26	10CP1
		3S	14	11.23	10 P2 3S	14	13.59	10CP2
010016	BEFORE START PROC-12	1P010002	02	0	10CP1 1P	06	0	10 P1
	-ALTIMETER	1P	03	2.5	10 P1 3H	03	3	10 P2
		3H	04	3.28	10 P2 3H	03	3.5	10CP3
		3H	04	3.78	10CP2 3H	04	7	10CP1
		3H	04	7.5	10 P1			10
010017	BEFORE START PROC-13	3L	01	0	10 P3 3L	01	0	10CP3
	-VSI/MACH AIRSPEED	1P010003	03	2.31	10CP1 1P	06	2.31	10 P2
		1P	03	8.31	10 P1 3A	02	8.81	10 P3
		3A	02	8.81	10CP1 3A	05	11.38	10 P3
		3A	05	11.38	10CP2 3A	04	13.95	10 P1
		3A	04	13.95	10CP1 3A	07	16.52	10 P3
		3A	07	16.52	10CP3			10
010018	BEFORE START PROC-14	3N	02	0	10 P3 3N	01	2.24	10 P1
	-CLOCKS/STDBY HOR	3N	02	0	10CP3 3N	01	2.24	10CP2
		3R	49	5	10 P1 3P	01	8	10 P1
		3P	04	10.7	10 P1			10
010019	BEFORE START PROC-15	7C	72	0	10 P3 7C	09	.1	10 P1
	-FUEL QTY TEST	7C	10	2.12	10 P1 7C	11	4.14	10 P1
010020	BEFORE START PROC-16	1P010004	04	0	10 P1 1P	02	0	10CP1
	-EPR/OIL QTY/VIBR	8B	04	1.5	10CP1 1P010005	05	3.5	10CP1
		1P	06	3.5	10CP1 1P	03	6	10 P1
		7F	25	6.5	10 P1 7F	26	9.03	10 P3
		7F	27	9.33	10 P1 7F	30	11.33	10 P2
		7F	28	13.35	10 P3 7F	29	13.65	10 P1
		7F	04	17	10 P4 7F	11	17.2	10 P1
		7F	19	19.25	10 P1 7F	01	23	10 P1
		7F	03	24.91	10 P3 7F	12	26.35	10 P3
		7F	20	28.37	10 P3 7F	02	30.39	10 P1
		7F	03	32.30	10 P3 7F	12	33.74	10 P3
		7F	20	35.76	10 P3			10
010021	BEFORE START PROC-17	4D	48	0	10 P1 4D	38	1.04	10 P1
	-ANTI-SKID/ANTI-BRK	4D	49	1.58	10 P1 4D	40	2.66	10 P1
010022	BEFORE START PROC-18	6A	10	0	10 P2 1N	02	2.38	10 P2
	-CENTER STAND ITEMS	4F	12	4.31	10 P1 4C	23	6.31	10 P1
		4B	04	7.51	10 P1 7M	14	10.05	10 P2
		4D	50	10.83	10 P1 4G	15	11.80	10 P1
010023				10				10
010024				10				10
010025				10				10
010026				10				10
010027				10				10
010028				10				10
010029				10				10
010030	BEFORE START PROC-2C	7H	17	0	10CP1 7H	14	5	10CP1
	-OXYGEN SYS	7H	11	6.4	10CP1 7H	22	7.8	10CP1
		7H	10	11.8	10CP1 7H	23	13.2	10CP1
		7H	13	17.2	10CP1 7H	12	18.6	10CP1
		7H	24	20.1	10CP1 7H	11	25	10CP1
		7H	24	26.4	10CP1 7H	12	30.4	10CP1
		7H	08	32	10CP1 7H	25	33.3	10CP1
		7H	09	37.3	10CP1 1B	23	42	10CP2
		1F	06	44.35	10CP1 7H	18	50	10CP1

	8D	04	1	0	10CP1	8E	01	1	2	10CP1
	8E	02	1	8	10CP1					10
010031 DETERMINE EPR, V1,	8B010004			0	10CP1	8B010006			3	10CP1
AND V-REF BUG SET	8B	01		33	10CP2	8B010007			35	10CP1
VALUES	8B	01	1	5	10CP2	8B010005	1	7		10CP1
010032 TUNE COMM RADIOS	8B010002			0	10CP1					10
010033 SET VHF-1L TO	1A	01		0	10CP3	1A	02		0	10CP2
CLEARANCE DELIVERY	1A	03		2.98	10CP1	1A	05		5	10CP2
121.65 AND REQUEST	1A	17		6.43	10CP2	1A	19		8.43	10CP4
CLEARANCE	1A	24		10	10CP1	1A	11		11.42	10CP1
	1P010055			11.42	10CP1	1A	14		18	10CP1
	1P010056			18	10CP1	1P010057			22.26	10CP1
	1P010058			27.94	10CP1	1P010059			33.62	10CP1
	8B	01		24	10CP1	1A	24		37	10CP2
	1A	11		38.42	10CP2	1P010060			38.42	10CP1
	1P010061			42.08	10CP1	1P010073			46.96	10CP1
	1A	14		49.4	10CP2	1P010062			49.4	10CP1
	1P010063			52.9	10CP1	8B	01		51	10CP2
	1A	24		56	10CP3	1A	11		57.42	10CP1
	1P010064			57.42	10CP1					10
010034 SET VHF-2R TO ATIS	1B	07		0	10CP3	1B	08		0	10CP2
-111.1	1B	09		2.88	10CP1	1B	06		4.86	10CP1
	1B	11		6.31	10CP2	1B	04		8	10CP1
	1B	18		6.31	10CP1	1P010065			6.31	10CP1
	1P010066			10.39	10CP1	1P010067			15.83	10CP1
	1P010068			21.27	10CP1	1P010069			26.71	10CP1
	1P010074			32.15	10CP1	8B	01		11	10CP1
	1B	12		37	10CP4					10
010035 SET XPNDR CODE TO	1N	06		0	10CP3	1N	05		0	10CP1
2213	1N	08		2.80	10CP1	1N	06		5.41	10CP1
	1N	18		5.41	10CP1					10
010036 SET RADAR	6A	02		0	10CP2	6A	14		2.66	10CP1
	6A	01		5.03	10CP1	6A	09		9.14	10CP1
010037 SET VHF-1R TO GROUND	8B010002			0	10CP1	1A	07		5	10CP3
CONTROL -121.9	1A	08		5	10CP2	1A	09		7.98	10CP1
010038 SET VHF-2L TO					10					10
ATLANTA TOWER-119.5	1B	01		0	10CP2	1B	02		0	10CP2
	1B	03		2.9	10CP1					10
010039 SET NAV-1 TO ATLANTA	8B010002			0	10CP1	5U	01		5	10CP3
VOR -115.6	5U	02		5	10CP3	5U	03		8	10CP2
	5U	11		11	10CP2	5U	12		13	10CP2
010040 SET NAV-2 TO SPAR-	5V	01		0	10CP3	5V	02		0	10CP2
TANBURG VOR -115.7	5V	03		2.93	10CP1	5V	11		5	10CP1
	5V	12		7.5	10CP2					10
010041 SET ADF-1 TO LAKE-	8B010002			0	10CP1	5D	19		5	10CP3
SIDE LOM	5D	02		8	10CP3	5D	01		8	10CP2
010042 BEFORE START PROC-19	7G	14		0	10 P1	4G	07		5	10 P1
-LITES/TRIM/PAPERS	4G	01		10	10 P1	4G	02		15	10 P3
	8B010003			20	10 P1					10
010043					10					10
010044					10					10
010045					10					10
010046					10					10
010047					10					10
010048					10					10
010049					10					10
010050 BEFORE START CHECK-	1P010006			0	10 P1	1P	02		0	10CP2
LIST - 1	1P	03		2	10CP1	8B	02		3	10CP3
	8B	05		9	10CP2	8B	02		14	10CP1
	1P010007			16	10CP1	1P	02		16	10 P1

	1P010008	19	10 P1	1P	06	19	10CP3
	8B 03	22	10CP1	1P010009		24	10CP1
	1P 02	24	10 P4	1P010010		26	10 P1
	1P 06	26	10 P3	8B 03		27	10CP1
	1P010011	29	10CP1	1P 02		29	10 P4
	1P010012	30	10 P1	1P 06		30	10CP3
010051 BEFORE START CHECK-	8B 03	0	10CP1	1P010013		2	10CP1
LIST - 2	1P 10	2	10 P1	4A 54		3	10 P1
	1P010014	4.21	10 P1	1P 06		4.21	10CP4
	8B 03	5	10CP2	1P010015		7	10CP1
	1P 06	7	10 P4	7C 09		7.5	10 P2
	7C 10	9.77	10 P1	7C 11		11.79	10 P1
	7C 70	13.89	10 P1	1P010016		15.48	10 P1
	1P 07	15.48	10CP1	8B 03		20	10CP1
	1P010017	22	10CP1	1P 10		22	10 P2
	7B 93	22.7	10 P1	1P010014		24.5	10 P1
	1P 06	24.5	10CP4	8B 03		25	10CP1
	1P010018	27	10CP1	1P 10		27	10 P3
	7G 38	28.2	10 P1	1P010019		29	10 P1
	1P 10	29	10CP4	8B 03		30	10CP1
	1P010020	32	10CP1	1P 02		32	10 P2
	7G 48	34	10 P1	1P010021		35.27	10 P1
	1P 06	35.27	10CP4			10	
010052 BEFORE START CHECK-	8B 03	0	10CP1	1P010022		2	10CP1
LIST - 3	1P 10	2	10 P1	7A 32		3	10 P1
	1P010026	5	10 P1	1P 07		5	10CP2
	8B 03	6	10CP1	1P010023		8	10CP1
	1P 02	8	10 P2	7D 67		10	10 P1
	7D 63	11.35	10 P1	7D 64		12.7	10 P1
	7D 05	14.01	10 P1	7D 66		14.78	10 P1
	1P010024	15.55	10 P1	1P 07		15.55	10CP3
	8B 03	18	10CP1	1P010025		20	10CP1
	1P 11	20	10 P1	4H 04		20.5	10 P1
	1P010027	22	10 P1	1P 07		22	10CP4
	8B 03	23	10CP1	1P010028		25	10CP1
	1P 11	25	10 P2	1P010029		26	10 P1
	1P 06	26	10CP3	8B 03		27	10CP1
	1P010030	29	10CP1	1P 11		29	10 P3
	4D 38	30	10 P1	1P010014		31	10 P1
	1P 06	31	10CP4	8B 03		32	10CP1
	1P010031	34	10CP1	1P 11		34	10 P3
	4D 49	35	10 P1	1P010032		30.5	10 P1
	1P 06	36.5	10CP4			10	
010053 BEFORE START CHECK-	8B 03	0	10CP1	1P010033		2	10CP1
LIST - 4	1P 02	2	10 P2	1P010034		4	10CP1
	1P 10	4	10 P3	8B 03		5.5	10CP1
	1P010035	7.5	10CP1	1P 11		7.5	10 P2
	4F 12	9	10 P1	1P010036		11	10 P1
	1P 06	11	10CP3	8B 03		12	10CP1
	1P010037	14	10CP1	1P 10		14	10 P2
	4D 27	14.7	10 P1	1P010038		18	10 P1
	1P 06	18	10CP4	8B 03		18.5	10CP1
	1P010039	19.5	10CP1	1P 11		19.5	10 P4
	4G 08	21.2	10 P2	4G 10		22.45	10 P2
	1P010026	24	10 P1	1P 07		24	10CP2
	8B 03	25	10CP1	1P010040		27	10CP1
	1P 02	27	10 P2	7P 14		29	10 P1
	1P010010	30.5	10 P1	1P 06		30.5	10CP3
010054 BEFORE START CHECK-	8B 03	0	10CP1	1P010041		2	10CP1
LIST - 5	1P 02	2	10 P1	1P010042		3.5	10 P1

	1P	07	3.5	10CP2	8B	03	4.5	10CP2
	1P010043		7	10CP1	1P	11	7	10 P2
	1P010044		8	10CP1	1P	07	8	10 P2
	8B	03	9	10CP1	1P010045		11	10CP1
	1P	02	11	10 P1	1P010038		13.5	10CP1
	1P	06	13.5	10 P4			10	
010055 BEFORE START CHECK-	1P010052		0	10 P1	1P	11	0	10CP4
LIST - 6	8B	03	2	10CP1	1P010046		4	10CP1
	1P	02	4	10 P4	7D	06	5.3	10 P3
	7D	20	7.95	10 P2	1P010047		10	10 P1
	1P	08	10	10CP1	8B	03	11	10CP1
	1P010048		13	10CP1	1P	11	13	10 P3
	7D	01	14	10 P1	1P010049		16.5	10 P1
	1P	08	16.5	10CP2	8B	03	18.2	10CP1
	1P010050		20.2	10CP1	1P	10	20.2	10 P3
	7G	25	22	10 P1	1P010014		24.5	10 P1
	1P	06	24.5	10CP4	8B	03	25	10CP1
	1P010051		27	10CP1	1P	11	27	10 P4
	8B	08	29	10CP1			10	
010056 CONTACT GROUND CON-	1A	06	0	10 P3	1A	25	2.3	10 P1
TROL FOR PUSHBACK	1A	11	2.3	10 P4	1P010070		2.3	10 P1
CLEARANCE	1P010071		6.3	10 P1	1A	14	11	10 *2
	1P010072		11	10 *1	1P010075		15.5	10 *1
	1A	25	18	10 P2	1A	11	18	10 P3
	1P010064		18	10 P1			10	
010057 PUSHBACK PROCEDURE-1	1F	07	0	10 P1	1F	06	2.44	10 P3
	1H	01	4.43	10 P1	1A	20	10	10 P2
	1F	11	10	10 P1	1P010053		10	10 P1
	1F	09	12	10 P1	1P010054		12	10 P1
	7A	02	13	10 P4	7A	04	15.75	10 P3
	4D	52	17.5	10 P1	8A	03	17.5	10 P4
010058 AIRCRAFT PUSHED BACK			10				10	
FROM GATE			10				10	
010059 AIRCRAFT STOPPED ON			10				10	
RAMP			10				10	
010060 PUSHBACK PROCEDURE-2	4D	28	0	10 P1			10	
010061 TOWBAR DISCONNECTED			10				10	
AND TUG DRIVEN AWAY			10				10	
010062 PUSHBACK PROCEDURE-3	1P030001		0	10 *1	1F	09	0	10 P2
020001 BEFORE START PROC-1A	4A	70	0	10 P1			10	
-LITES/SEATS/PEDALS			10				10	
020002 BEFORE START PROC -	7G	24	0	10 P2	7M	12	1.5	10 P2
10A -LITES/ENG STRT	7M	13	3.5	10 P2			10	
020003 BEFORE START PROC -	2J	23	0	10 P1	2J	24	2.27	10 P1
10B -EADI	2J	26	4.54	10 P2	2J	32	5.87	10 P2
020004 BEFORE START PROC -	2K	03	0	10 P1	2K	04	2.64	10 P1
10C -MFD - CAPT.	2K	02	5.64	10 P2	2K	07	7.61	10 P2
	2K	18	9.53	10 P1	2K	19	11.6	10 P3
	2K	25	12.98	10 P1			10	
020005 BEFORE START PROC -	2H	52	0	10 P1	2H	53	0	10 P1
10D -AGCS	2H	54	2	10 P1	2H	53	2	10 P1
	2H	02	4	10 P1	2H	09	5.05	10 P1
020006 BEFORE START PROC -	8B020001		0	10 P1	8B020002		3	10 P1
15A -FUEL QTY/V-REF	7C	02	6	10 P1	7C	03	6	10 P1
	7C	07	10	10 P1	7C	01	11.8	10 P1
	8B020003		14.1	10 P1			10	
020007 BEFORE START PROC -	2J	36	0	10 P1	2J	37	2	10 P1
18A -CRTAS	2K	54	4	10 P1	2K	55	6	10 P1
	2L	02	8	10 P1			10	
020008 CO-PILOT SEATED	8C	03	0	10CP1	8C	02	3	10CP1

	4A	46	13	10CP1	4A	70	16	10CP1
	8E	03	19	10CP1				10
020009 SET VHF-1L TO	1Q	01	0	10CP4	1Q	02	0	10CP2
CLEARANCE DELEVERY	1Q	03	3	10CP2	1Q	05	4.97	10CP2
-121.65	1Q	12	6.42	10CP2	1Q	11	8.76	10CP2
	1Q	14	11.56	10CP3	1Q	15	11.56	10CP1
	1P010055		11.56	10CP1	1Q	16	18	10CP1
	1P020001	18		10CP1	1P020002		22	10CP1
	1P020003	26		10CP1	1Q	14	30	10CP4
	1Q	15	30	10CP2	1P020004		30	10CP1
	1P020005	34		10CP1	1P020006		38	10CP1
	1Q	16	43	10CP2	1P010002		43	10CP1
	1P010063	46.5		10CP1	1Q	23	50	10CP1
	1Q	15	50	10CP3	1P010064		50	10CP1
020010 SET VHF-2R TO ATIS	1R	07	0	10CP3	1R	08	0	10CP4
-111.1	1R	09	2.9	10CP2	1R	12	4.48	10CP2
	1R	06	5.91	10CP2	1R	04	7.38	10CP3
	1R	35	30	10CP3	1P010065		8.96	10CP1
	1P010066	13.04		10CP1	1P010067		18.48	10CP1
	1P010068	23.92		10CP1	1P010069		29.36	10CP1
	1P010074	34.80		10CP1	8B	01	11	10CP1
	1R	13	39	10CP2				10
020011 SET VHF-1R TO GROUND	8B010002	0		10CP1	1Q	07	5	10CP3
CONTROL -121.9	1Q	08	5	10CP4	1Q	09	7.9	10CP2
020012 SET VHF-2L TO	1Q	01	0	10CP4	1Q	02	0	10CP2
ATLANTA TOWER-119.5	1Q	03	3	10CP2				10
020013 SET NAV-1 TO ATLANTA	8B010002	0		10CP1	5W	01	5	10CP3
VOR -115.6	5W	02	5	10CP2	5W	03	7.37	10CP2
	5W	05	9	10CP2				10
020014 SET NAV-2 TO ATLANTA	5X	01	0	10CP3	5X	02	0	10CP2
VOR -115.6	5X	03	2.95	10CP2	5X	05	4.6	10CP2
020015 SET NAV-3 TO AUGUSTA	8B010002	0		10CP1	5Y	01	5	10CP3
VOR -113.9	5Y	02	5	10CP1	5Y	03	8.12	10CP2
	5Y	05	9.8	10CP1				10
020016 SET CRTAS	2J	36	0	10CP1	2J	37	2	10CP1
	2K	54	4	10CP1	2K	55	6	10CP1
	2L	02	8	10CP1				10
020017 NCDU TEST	2L	01	0	10CP1	2L	09	2.67	10CP1
	2L	01	7.67	10CP1				10
020018 SYSTEM STATUS CHECK	2L	68	0	10CP3	2L	16	1.46	10CP3
020019 PRE-FLIGHT FLIGHT								10
PLAN INITIALIZATION								10
PROCEDURE								10
020020 MFD SET-UP	2K	02	0	10CP4	2K	18	2.67	10CP4
	2K	19	4.05	10CP1	2K	21	5.43	10CP3
	2K	22	6.81	10CP2	2K	07	8.14	10CP3
020021 INITIALIZE PAGE -	2L	63	0	10CP1	2L	19	1.48	10CP1
TIME OF DAY INPUT	3N	02	3.82	10CP3	2L	28	6.06	10CP1
	2L	20	15.51	10CP2				10
020022 TIME OF DAY-08:15:45	2L	35	7.41	10CP1	2L	33	8.76	10CP2
	2L	26	10.11	10CP3	2L	30	11.46	10CP1
	2L	29	12.81	10CP1	2L	30	14.16	10CP1
020023 INITIALIZE PAGE -	2L	19	0	10CP1	2L	26	2.34	10CP1
ORIGIN INPUT	2L	07	9.41	10CP2	2L	20	11.46	10CP1
020024 ORIGIN NAME - KATL	2L	47	3.79	10CP1	2L	37	5.14	10CP2
	2L	56	6.6	10CP2	2L	48	8.06	10CP1
020025 INITIALIZE PAGE -	2L	19	0	10CP2	2L	27	2.03	10CP2
DESTINATION INPUT	2L	07	9.13	10CP2	2L	20	11.20	10CP3
020026 DESTINATION NAME-	2L	47	3.56	10CP1	2L	40	4.88	10CP1
KDCA	2L	39	6.23	10CP1	2L	37	7.68	10CP1

020027	INITIALIZE PAGE-	2L	19	0	10CP2	3H	04	2.08	10CP2
	BAROMETER VALUE	2L	29	4.45	10CP2	2L	07	12.66	10CP2
	INPUT	2L	20	14.74	10CP3				10
020028	BAROMETER VALUE -	2L	27	5.91	10CP1	2L	34	7.26	10CP1
	29.86	2L	36	8.61	10CP1	2L	33	9.96	10CP2
		2L	31	11.31	10CP1				10
020029	REVIEW NEW DATA ON	2L	07	0	10CP3				10
	INITIALIZE PAGE FOR				10				10
	ACCURACY				10				10
020030	SELECT ATC CLEARANCE	2L	64	0	10CP1	2L	08	2.03	10CP2
	PAGE				10				10
020031	ATC CLEARANCE PAGE-	2L	51	0	10CP2	2L	08	8.35	10CP1
	SID INPUT	2K	14	10.69	10CP1	2L	20	12.96	10CP3
020032	SID NAME - SOC9L	2L	55	1.46	10CP1	2L	51	2.81	10CP1
		2L	39	4.16	10CP1	2L	34	5.54	10CP1
		2L	48	6.89	10CP2				10
020033	DETERMINE NAME OF	2K	14	0	10CP1				10
	EXIT WAYPOINT ON				10				10
	SID SOC9L				10				10
020034	ATC CLEARANCE PAGE-	2L	37	0	10CP2	2L	08	6.96	10CP1
	WAYPOINT INPUT	2L	20	9.30	10CP3				10
020035	WAYPOINT NAME - SID3	2L	55	1.46	10CP1	2L	45	2.81	10CP2
		2L	40	4.16	10CP2	2L	28	5.48	10CP1
020036	ATC CLEARANCE PAGE-	2L	38	0	10CP2	2L	08	8.32	10CP1
	AIRWAY INPUT	2K	17	10.66	10CP1	2L	20	12.93	10CP3
020037	AIRWAY NAME - 816R	2L	33	1.48	10CP1	2L	26	2.92	10CP3
		2L	31	4.27	10CP1	2L	54	5.62	10CP1
020038	DETERMINE NAME OF	2K	17	0	10CP1				10
	ENTRANCE WPT ON STAR				10				10
	JASON01				10				10
020039	ATC CLEARANCE PAGE -	2L	52	0	10CP2	2L	08	7.08	10CP1
	STAR INPUT	2K	17	9.42	10CP1				10
020040	STAR NAME - WOOD	2L	59	1.46	10CP2	2L	51	2.92	10CP1
		2L	51	4.27	10CP1	2L	40	5.62	10CP3
020041	CHANGE MFD MAP	2K	10	0	10CP4				10
	SCALE TO 32 NM				10				10
020042	SELECT FLIGHT PLAN	2L	65	0	10CP1	2L	09	2.03	10CP2
	PAGE 2	2L	65	4.11	10CP3	2L	10	5.46	10CP2
020043	REVIEW PROVISIONAL	2L	09	0	10CP2	2K	17	2.08	10CP1
	FLIGHT PLAN DATA	2L	24	4.35	10CP2				10
020044	ACCEPT PROVISIONAL	2L	21	0	10CP4	2L	09	1.52	10CP2
	FLIGHT PLAN	2K	17	3.6	10CP1	1P020007		5.87	10CP1
		1P	17	5.87	10 P4				10
020045	BEFORE START CHECK-	8B	03	0	10CP1	1P020008		2	10CP1
	LIST - 5A	1P	10	2	10 P1	1P020009		3	10CP1
		1P	06	3	10 P3	8B 03		4	10CP1
		1P020010		6	10CP1	1P 10		6	10 P4
		1P020009		6.6	10CP1	1P 06		6.6	10 P3
		8B 03		7	10CP1	1P020011		9	10CP1
		1P 10		9	10 P1				10
		1P020009		10	10CP1	1P 06		10	10 P3
		8B 03		11	10CP1	1P020012		13	10CP1
		1P 10		13	10 P1	1P020013		14	10 P1
		1P 08		14	10CP3				10
020046	CONTACT GROUND CON-	1Q	06	0	10CP2	1Q 24		1.45	10CP1
	TROL FOR PUSHBACK	1Q	15	1.45	10CP4	1P010070		1.45	10CP1
	CLEARANCE	1P010071		5.45	10CP1	1Q 16		9	10 *3
		1P010072		9	10 *1	1P010075		13.50	10 *1
		1Q 24		15	10CP2	1Q 15		15	10CP3
		1P010064		15	10CP1				10

020047 WAYPOINT NAME - AGE1	2L	37	1.46	10CP1	2L	43	2.81	10CP2
	2L	41	4.27	10CP1	2L	26	5.62	10CP3
030001 ENGINE NO.2 START-UP	1A	25	0	10 P3	1P030002		2.35	10 P1
	1F	11	2.35	10 P2	1F	09	5	10 P2
	1P030001		5	10 P1	7M	05	7	10 P3
	7F	24	10.54	10 P3	7F	22	20.54	10 P2
	7M	09	23.06	10 P1	7F	17	25.57	10 P2
	7F	32	27.82	10 P1	7F	34	29.84	10 P1
	7M	15	31.63	10 P1	7F	24	34.15	10 P2
	7F	32	36.67	10 P1	7F	34	38.69	10 P1
	7F	30	40.71	10 P1	7F	22	42.95	10 P1
	7F	17	44.97	10 P1	1F	11	2.35	10CP2
	7F	24	12	10CP2	7F	22	16	10CP1
	7F	17	25	10CP1	7F	32	28	10CP1
	7F	34	31	10CP1	7F	24	35	10CP1
	7F	32	37.02	10CP1	7F	34	39.04	10CP1
	7F	30	41.06	10CP1	7F	22	43.30	10CP1
	7F	17	45.32	10CP1	7F	24	47.37	10CP1
	7F	32	49.39	10CP1	7F	34	51.41	10CP1
030002 ENGINE NO.1 START-UP	1A	25	0	10 P3	1F	11	1.45	10 P2
	1P030003		1.45	10 P1	1F	09	5	10 P2
	1P030001		5	10 P1	7M	02	7	10 P3
	7F	23	10.54	10 P3	7F	21	20.54	10 P2
	7M	07	23.06	10 P1	7F	09	25.57	10 P1
	7F	31	27.62	10 P1	7F	33	29.64	10 P1
	7M	16	31.66	10 P1	7F	23	32.96	10 P2
	7F	31	35.48	10 P1	7F	33	37.50	10 P1
	7F	25	39.52	10 P1	7F	21	41.76	10 P1
	7F	09	43.78	10 P1	7F	23	11	10CP3
	7F	21	21	10CP2	7F	09	23.52	10CP1
	7F	31	25.57	10CP1	7F	33	27.59	10CP1
	7F	23	29.61	10CP1	7F	32	31.63	10CP1
	7F	31	33.65	10CP1	7F	25	35.67	10CP1
	7F	21	37.91	10CP1	7F	09	39.93	10CP1
030003 AFTER START PROC.	7B	32	0	10 P1	7B	42	1.72	10 P1
	7B	31	3.44	10 P1	7B	41	4.03	10 P1
	7J	24	4.62	10 P1	7J	26	7.37	10 P2
	7J	28	8.79	10 P1	7J	30	9.92	10 P1
	7J	32	11.05	10 P1	7J	34	12.18	10 P1
	7J	36	13.32	10 P1	7J	38	14.46	10 P1
	7Q	10	15.6	10 P1	7Q	13	17.15	10 P2
	7Q	16	18.27	10 P1	7Q	19	19.39	10 P1
	7Q	22	20.59	10 P1	7Q	25	21.03	10 P1
	7Q	28	22.75	10 P1	7Q	31	23.87	10 P1
	7D	05	24.99	10 P4	7D	19	27.68	10 P2
	7D	18	29.2	10 P2	7D	34	30.73	10 P1
	7L	11	31.01	10 P3	7E	15	33.58	10 P3
	7M	03	36.64	10 P4	7M	06	38.38	10 P4
	7M	08	40.12	10 P1	7M	10	43.12	10 P2
030004 AFTER START CHECK- LIST - 1	1P030004		0	10 P1	1P	02	0	10CP1
	8B	02	1.5	10CP3	8B	03	7.4	10CP1
	1P030005		9.4	10CP1	1P	11	9.4	10 P2
	7B	31	10.2	10 P2	7B	41	11.12	10 P1
	1P030006		12	10 P1	1P	08	12	10CP3
	8B	03	13.5	10CP1	1P030007		15.5	10CP1
	1P	11	15.5	10 P3	7J	45	16.4	10 P1
	7J	46	17.87	10 P1	1P010014		19	10 P1
	1P	06	19	10CP4	8B	03	19.5	10CP1
	1P030008		21.50	10 P1	1P	11	21.5	10 P3
	1P030009		22.40	10 P1	1P	06	22.4	10CP3

030005 AFTER START CHECK-	8B	03	0	10CP1	1P030010	2	10CP1
LIST - 2	1P	10	2	10 P3	7D	10	3.6 10 P1
	7D	22	4.6	10 P1	7E	35	5.6 10 P1
	1P030011		6.3	10 P1	1P	09	6.3 10CP1
	8B	03	2.6	10CP1	1P030012		9.6 10CP1
	1P	11	9.6	10 P3	7M	11	10.5 10 P1
	1P030013		11.1	10 P1	1P	08	11.1 10CP4
030006 AFTER START CHECK-	8B	03	0	10CP1	1P030014	2	10CP1
LIST - 3	1P	11	2	10 P2	7L	20	3 10 P1
	1P030015		3.75	10 P1	1P	06	3.75 10CP4
	8B	03	4.25	10CP1	1P030016		6.25 10CP1
	1P	10	6.25	10 P1	7M	14	2.25 10 P1
	1P030017		8.55	10 P1	1P	06	8.55 10CP4
	8B	03	9.05	10CP1	1P030018		11.05 10CP1
	1P	12	11.05	10 P2	8B	08	12.45 10CP1
030007 ENGINE INSTRUMENT	7F	25	0	10CP4	7F	30	0 10CP3
SCAN	7F	21	.44	10CP3	7F	22	.44 10CP3
	7F	31	.88	10CP2	7F	32	.88 10CP2
	7F	23	1.32	10CP4	7F	24	1.32 10CP4
	7F	33	1.76	10CP2	7F	34	1.76 10CP2
	7F	09	2.2	10CP3			10
	7F	10	2.64	10CP4	7F	18	2.64 10CP4
	7F	11	3.08	10CP3	7F	19	3.08 10CP4
	7F	12	3.52	10CP4	7F	20	3.52 10CP4
040001 TAXI PROCEDURE - 1	1A	20	0	10 P1	1A	12	0 10 P1
-TAXI CLEARANCE	1P040035		0	10 P1	1A	14	5 10 *3
	1P040036		5	10 *1	1P040037		8.5 10 *1
	1A	10	13	10 P2	1A	11	13 10 P1
	1P040038		13	10 P1	1P040039		16.75 10 P1
040002 TAXI PROCEDURE - 1	8A	02	0	10 P2	4D	52	0 10 P1
-TAXI FROM GATE TO	4M	02	0	10 P3	4B	03	1 10 P4
TAXIWAY D	1P070011		5	10 P1	1P	10	5 10CP1
	4E	09	6	10CP3	4E	15	10 10CP3
	4E	16	13	10CP1	3V	18	20 10CP1
	3V	26	22.07	10CP1	7A	28	26 10CP1
	7A	33	28.28	10CP1	4A	21	30 10CP1
	4A	22	32	10CP1			10
	4M	01	15	10 P2	4A	58	15 10 P1
040003 TAXI PROCEDURE - 0	8A	02	0	10 P3	4M	02	0 10 P4
-TURN ONTO TAXIWAY	4B	03	10	10 P1			10
D AND TAXI TO HOLD	4D	28	1	09	10 P2	4B	08 12 10 P1
POINT SHORT OF							10
RWY 08							10
040004 HOLD SHORT OF RWY 08							10
FOR DEPARTING AND							10
ARRIVING TRAFFIC							10
040005 TAXI PROCEDURE - 4	1A	14	0	10 P4	1P040001		0 10 *1
-CROSS RWY 08 AND	1A	10	4	10 P3	1A	11	4 10 P3
TAXI TO HOLD POINT	1P040003		4	10 P1	4D	52	8 10 P1
AT TAXIWAY C	4B	03	8	10 P2	8A	02	8 10 P3
JUNCTION	4M	03	8	10 P1	1A	15	30 10 *1
	1P040030		30	10 *1	1P040031		33 10 *1
	1A	11	35	10 P3	1P040003		35 10 P1
	4D	28	53	10 P2	4B	03	53 10 P1
040006 HOLD AT JUNCTION OF							10
TAXIWAYS C AND D FOR							10
TRAFFIC TO CLEAR							10
040007 TAXI PROCEDURE - 5	4D	52	0	10 P1	4B	03	1 10 P2
-TAXI FROM JUNCTION	8A	04	0	10 P1	4N	03	4 10 P2
TO TAXIWAY L	1A	15	30	10 *2	1P040032		30 10 *1

	IP040032	33	10 *1 1A	25	35	10CP4
	1A 12	35	10CP2 1P040034		35	10CP1
	1B 11	40	10CP3 4D	28	1	44 10 P2
	4B 03	1	44 10 P2			10
040008 TAXI PROCEDURE - 6	4M 01	0	10 P4 8A	04	0	10 P2
-TURN ONTO TAXIWAY L	4B 03	10	10 P2 4M	03	10	10 P3
AND TAXI INTO RWY	4D 28	1	40 10 P2 4B	03	1	40 10 P2
9L HOLD AREA	4M 01	1	40 10 P4 4D	27	1	50 10 P1
040010 TAXI PROCEDURE - 1A	1Q 24	0	10CP3 1Q	28	0	10CP1
-TAXI CLEARANCE	1P040035	0	10CP1 1Q	16	4	10CP2
	1P040036	4	10CP1 1P040037		7.5	10CP1
	1Q 14	11	10CP3 1Q	15	11	10CP1
	1P040038	11	10CP1 1P040039		14.75	10CP1
040011 TAXI PROCEDURE - 4A	1Q 16	0	10CP4 1P040001		0	10CP1
	1Q 23	4	10CP1 1Q	15	4	10CP3
	1P040003	4	10CP1 4D	52	8	10 P1
	4B 03	8	10 P2 8A	02	8	10 P4
	4M 03	8	10 P1 1Q	30	30	10CP1
	1P040030	30	10CP1 1P040031		33	10CP1
	1Q 23	35	10CP1 1Q	15	35	10CP3
	1P040003	35	10CP1 4D	28	53	10 P2
	4B 03	53	10 P1		10	
040012 TAXI PROCEDURE - 5A	4D 52	0	10 P1 4B	03	1	10 P2
	8A 04	0	10 P1 4M	03	4	10 P2
	1Q 30	30	10CP2 1P040032		30	10CP1
	1P040033	33	10CP1 1Q	24	35	10CP4
	1Q 28	35	10CP2 1P040034		35	10CP1
	1R 12	40	10CP2 4D	28	1	44 10 P2
	4B 03	1	44 10 P2		10	
070001 BEFORE TAKEOFF	1P070012	0	10 P1 1P	02	0	10CP1
CHECKLIST - 1	8B 02	1.5	10CP3 8B	03	8	10CP1
	1P070013	10	10 P1 1P	10	10	10 P1
	1P070014	11	10CP1 1P	07	11	10CP4
	8B 03	12	10CP1 1P070015		14	10 P1
	1P 10	14	10 P1 1P070014		15	10 P1
	1P 07	15	10CP4 8B	03	16	10CP1
	1P070016	18	10CP1 1P	10	18	10 P4
	4E 16	18.6	10CP1 4N	05	21.1	10CP2
	1P070017	22.5	10CP1 1P	06	22.5	10CP3
070002 BEFORE TAKEOFF	8B 03	0	10CP1 1P070018		2	10 P1
CHECKLIST - 2	1P 10	2	10 P3 4G	03	3.2	10 P1
	1P070029	5.7	10CP1 1P	09	5.7	10CP2
	8B 03	7.1	10CP1 1P070019		9.1	10 P1
	1P 10	9.1	10 P1 1P070020		10.1	10CP1
	1P 07	10.1	10CP2 8B	03	11	10CP1
	1P070021	13	10CP1 1P	10	13	10 P1
	1P070022	14	10 P1 1P070023		18.5	10 P1
	1P 09	14	10CP3 1P070024		24	10CP1
070003 BEFORE TAKEOFF	8B 03	0	10CP1 1P070025		2	10CP1
CHECKLIST - 3	1P 10	2	10 P1 1N	03	3.5	10CP1
	6A 11	5.43	10CP1 1P070026		7.8	10CP1
	1P 06	7.8	10 P4 8B	03	8.5	10CP1
	1P070027	9.5	10CP1 1P	02	9.5	10 P1
	7G 17	11	10 P1 1P070026		13.2	10 P1
	1P 06	13.2	10CP4 8B	03	14	10CP1
	1P030018	16	10CP1 1P	12	16	10 P3
	8B 08	17	10CP1		10	
070004 CLEARED TO TAXI ONTO	1B 14	0	10CP1 1B	15	0	10CP1
RUNWAY 9L	1P070005	0	10CP1 1P070006		3.6	10CP1
	1B 18	6	10 *2 1P070007		6	10 *1

	1B	14	9	10CP2	1B	15	9	10CP2
	1P070008		9	10CP1	4D	52	13	10 P1
	4B	03	14	10 P2	4M	01	14	10 P4
	4B	03	24	10 P1	4D	28	27	10 P1
	8A	08	10	10 P2				10
070005 RECEIVE TAKEOFF	1B	18	0	10 P2	1P070009		0	10 *1
CLEARANCE	13	14	3	10 P2	1B	15	3	10 P3
	1P070010		3	10 P1				10
070006 TAKEOFF ROLL	8A	04	0	10 P4	4A	64	0	10 P1
	4M	03	0	10 P1				10
	4B	05	0	10 P1	7F	29	2	10 P2
	7F	34	2.76	10 P2	4B	06	5	10 P1
	7F	27	8	10CP2	7F	30	8	10CP3
	4B	07	10	10CP1	3A	01	12	10CP4
				10	3A	01	20	10 P1
	3A	09	20	10CP3	1P070001		20	10CP1
	1P	12	20	10 P4	3A	03	25	10CP4
	1P070002		27	10CP1	1P	11	27	10 P3
070007 ROTATION, TAKEOFF, AND	3A	01	0	10CP3	3A	03	0	10CP1
GEAR UP	1R070002		0	10CR1	3A	03	.9	10CR3
	1P070003		.9	10CP1	1P	04	0	10 P3
	4A	24	2.0	10 P2	3A	01	2.37	10CP4
	3A	10	2.6	10 P1	3L	02	3.2	10 P1
	3H	06	3.8	10 P2	3R	10	4.4	10 P4
	1P070034		4.5	10CP1	1P	12	4.5	10 P4
	1P070004		5.6	10 P1	1P	12	5.6	10CP4
	4D	01	6.0	10CP2	4D	07	12.0	10CP1
	4D	09	12.54	10CP1	1P070033		13.08	10CP1
	1P	12	13.08	10 P4	4D	02	13.08	10CP2
070008 SET HEADING BUGS TO	3S	11	0	10 P1	3S	12	5	10 P2
090 DEG AND COURSE	3S	11	0	10CP1	3S	12	5	10CP2
BUGS TO 105 DEG				10				10
070009 SET EADI AND MFD FOR	2K	01	0	10CP4	2K	25	2.67	10CP1
TAKEOFF	2K	38	4.05	10CP3	2K	07	5.43	10CP3
	2J	32	9.66	10CP1	2J	15	11.81	10CP1
	2K	14	7.39	10CP1				10
070010 TAKEOFF ROLL - A	8A	04	0	10 P4	4B	05	0	10 P1
	7F	29	3	10 P2	7F	34	3	10 P2
	4B	06	5	10 P1	4A	64	0	10 P1
				10	3A	01	20	10 P1
	7F	27	8	10CP2	7F	30	8	10CP3
	4B	07	10	10CP1	3A	01	12	10CP4
	3A	09	20	10CP3	1P070001		20	10CP1
	1P	12	20	10 P4	3A	03	25	10CP4
	1P070002		27	10CP1	1P	11	27	10 P3
070011 ROTATION, FLARE, AND	3A	06	0	10CP4	1P070003		1	10CP1
GEAR UP - A	1P	11	1	10 P3	4A	24	2	10 P2
	3A	01	4	10 P2	3L	01	4	10 P4
	3L	01	10	10CP4	4D	01	10	10CP2
	4D	07	15	10CP2	4D	09	16	10CP2
070012 CLEARED TO TAXI ONTO	1R	23	0	10CP2	1R	36	0	10CP1
RUNWAY 9L - A	1P070005		0	10CP1	1P070006		36	10CP1
	1R	32	6	10CP1	1P070007		6	10CP1
	1R	23	9	10CP3	1R	36	9	10CP2
	1P070008		9	10CP1	4D	52	13	10 P1
	4B	03	14	10 P2	4M	01	14	10 P4
	4B	03	24	10 P1	4D	28	18.5	10 P1
	8A	04	10	10 P4				10
070013 WAIT FOR TAKEOFF			10					10
CLEARANCE			10					10

070014	RECEIVE TAKEOFF CLEARANCE	1R 32 1R 23 1P070010	0 10 P1 1P070009 3 10 P4 1R 36 3 10 P1	0 10 P1 3 10 P3 10
070015	BEFORE TAKEOFF CHECKLIST - 3A	8B 03 1P 10 1P070026 8B 03 1P 12 1P070032 8B 03 1P 02 1P070026 8B 03 1P 12 1B 18 1P090024 1B 15 1B 07 1B 09 1B 13 1P090003 1P090005 1N 18 1P090006 1B 16 4A 64	0 10CP1 1P070030 2 10 P2 1N 03 4.63 10CP1 1P 06 5.13 10CP1 1P070031 2.13 10 P4 2H 02 9.28 10 P1 1P 18 9 10CP1 1P070027 11 10 P1 7G 17 14.7 10 P1 1P 06 15.2 10CP1 1P070027 17.2 10 P3 8B 08 0 10 *3 1P090001 4.50 10 *1 1B 14 6 10CP4 1P090002 8 10CP3 1B 08 10.88 10CP1 1B 06 14.5 10CP3 1B 16 14.5 10CP1 1B 18 18 10 *1 1N 07 23.65 10CP1 1B 19 28 10 *1 1B 13 32 10CP2 1P090007 0 10 P2 8A 05 10	2 10CP1 2.7 10CP1 4.63 10 P4 7.13 10CP1 8.23 10 P1 9.28 10CP1 11 10CP1 12.5 10 P1 14.7 10CP4 17.2 10CP1 17.2 10CP1 0 10 *1 6 10CP4 6 10CP1 8 10CP2 13 10CP1 14.5 10CP1 18 10 *4 21.5 10CP1 28 10 *1 32 10CP4 32 10CP1 0 10 P1 10
090001	CONTACT DEPARTURE CONTROL 125.7			
090002	CONTROL AIRCRAFT - A (10 SEC PROC)			
090003	FLIGHT INSTRUMENT SCAN - A	3R 10 3A 10	0 10 P4 3L 02 0 10 P1 3S 01	0 10 P1 0 10 P2
090004	CROSS RWY 27R MIDDLE MARKER, TURN TO HDG 105	3V 13 3S 12	0 10 P1 4A 28 5 10 P2 10 10 10	0 10 P2 10 10 10
090005	COMPLETE TURN - ON HDG 105			
090006	RETRACT FLAPS TO FLAPS 1. SET CLIMB THRUST.	3A 01 1P 10 4E 15 4N 04 1P 07 7F 25 3H 02	0 10 P3 1P090022 2.37 10CP4 4E 07 5.69 10CP3 4N 03 10 10CP2 1P090063 11 10 P4 1B 03 15 10 P4 7F 30 0 10 P1 4B 03 10 10 10 10 10	2.37 10 P1 3 10CP1 7.92 10CP2 11 10CP1 12 10CP1 15 10 P3 2 10 P1 10 10 10 10 10
090007	REACH 3000 FT ABOVE GROUND LEVEL. BEGIN ACCELERATION TO 250 KIAS. MAINTAIN 500- 1000 FT/MIN CLIMB			
090008	CONTROL AIRCRAFT - B (5 SEC PROC)	4A 64	0 10 P3 8A 05 10	0 10 P2 10
090009	FLIGHT INSTRUMENT SCAN - B	3R 56 3A 10	0 10 P1 3L 02 0 10 P2 3S 01	0 10 P2 0 10 P3
090010	RECEIVE INSTRUCTIONS TO TURN TO HDG 070 TO INTERCEPT J37	1B 19 1P090026 1B 16 1P090028 3S 12 1P090022 1P 10 4E 15 4N 04 1P 07 7F 25	0 10 *2 1P090025 3 10 *1 1B 24 7 10CP3 1P090027 11 10CP1 4A 28 7 10 P2 2.37 10 P1 2.37 10CP4 4E 06 5.69 10CP3 4N 03 10 10CP2 1P090064 11 10 P4 1P 03 13 10 P4 7F 30	0 10 *1 7 10CP1 7 10CP1 7 10 P3 10 10 3 10CP3 7.92 10CP2 11 10CP1 12 10 P1 13 10 P3
090011	RETRACT FLAPS TO FLAPS 0.			

090012	COMPLETE TURN - ON			10		10
	HDG 070			10		10
090013	REACH 250 KIAS			10		10
090014	AFTER TAKEOFF CHECK-	1P090017	0	10 P1 1P	10	0 10CP2
	LIST	8B090001	1.2	10CP1 1P090018		3.2 10 P1
		7M 12	4.1	10CP1 7M	13	6.51 10CP2
		1P090019	7.29	10CP1 1P	06	7.29 10 P4
		8B090001	8	10CP1 1P090020		10 10CP1
		1P 11	10	10 P3 4D	08	11 10CP2
		4D 11	11.72	10CP1 1P090021		12.5 10CP1
		1P 06	12.5	10 P3 8B090001		13.5 10CP1
		1P090022	15.5	10CP1 1P	10	15.5 10 P4
		1P090021	16.5	10CP1 1P	06	16.5 10 P3
		8B090001	18	10CP1 1P090023		20 10CP1
		1P 09	20	10 P4		10
090015	RECEIVE CLEARANCE TO	1B 18	0	10 *4 1P090029		0 10 *1
	CLIMB TO 12000 FT	1B 24	4	10CP2 1B	16	4 10CP4
		1P090030	4	10CP1 1P	04	4 10 P1
090016	CONTROL AIRCRAFT - C	4A 64	0	10 P4 8A	05	0 10 P3
	(SEC PROC)		10			10
090017	FLIGHT INSTRUMENT	3R 56	0	10 P2 3L	02	0 10 P3
	SCAN - C	3A 10	0	10 P3 3S	01	0 10 P4
090018	CONTROL AIRCRAFT - D	4A 65	0	10 P1 8A	05	0 10 P4
	(60 SEC PROC)		10			10
090019	FLIGHT INSTRUMENT	3R 56	0	10 P3 3L	02	0 10 P4
	SCAN - D	3A 10	0	10 P4 3S	15	0 10 P1
090020	REACH 10000FT.	3S 01	0	10 P2 4A	28	0 10 P4
	BEGIN TURN TO HDG	8A 08	0	10 P4		10
	053.		10			10
090021	SET CI COURSE CURSOR	3S 12	0	10 2		10
	TO 053 DEG.		10			10
090022	TURN COMPLETED - ON	4B 03	0	10 P2 7F	25	0 10 P2
	HDG 053. BEGIN	7F 30	2	10 P3 3A	01	2 10 P1
	ACCELERATION TO 280		10			10
	KIAS		10			10
090023	HANDOFF TO ATLANTA	1B 19	0	10 *3 1P090008		0 10 *1
	EAST DEPARTURE SEC-	1P090009	3.1	10 *1 1B	26	7 10CP1
	TOR. -123.95	1B 17	7	10CP1 1P090010		7 10CP1
		1P090011	10.5	10CP1 1B	01	15 10CP2
		1B 02	15	10CP2 1B	03	17.9 10CP1
		1B 28	21	10CP1 1B	17	21 10CP2
		1P090012	21	10CP1 1P090013		25.50 10CP1
		1B 18	28	10 *4 1P090014		28 10 *1
		1N 07	32	10CP1 1B	18	36 10 *4
		1P090015	36	10 *1 1B	24	40 10CP4
		1B 16	40	10CP1 1P090016		40 10CP1
090024	TUNE COMPANY AND	1A 01	0	10CP3 1A	02	0 10CP2
	EMERGENCY FREQAS	1A 03	2.98	10CP1 1A	07	6 10CP4
		1A 08	6	10CP3 1A	09	8.01 10CP1
090025	RECEIVE NOTICE OF	1B 19	0	10 *4 1P090031		0 10 *1
	CONFLICTING TRAFFIC	1P090032	3.75	10 *1 1P090033		8.75 10 *1
			10	8A 03		10 10CP1
		1B 25	12	10CP1 1B	17	12 10CP2
		1P090034	12	10CP1 1P090035		16 10CP1
090026	BEGIN 500 FT/MIN		10			10
	RATE OF CLIMB		10			10
090027	LEVEL OFF AT 18000		10			10
090028	RECEIVE CLEARANCE TO	1B 19	0	10 *2 1P090036		0 10 *1
	RESUME CLIMB TO	1P090037	3	10 *1 1B	25	7 10CP2
	CRUISE ALTITUDE	1B 17	7	10CP3 1P090038		7 10CP1

090029	CLIMB THRU 23000 FT.	3H	02	10.5	10CP1		10
	HANDOFF TO SPARTAN-	1B	17	0	10CP1 1B	25	2 10CP3
	BURG HIGH SECTOR	1P090046		2	10CP4 1P090045		2 10CP1
	-133.7	1P090041		5.7	10CP1 1B	19	9 10 *2
		1B	25	9	10 *1 1P090042		12.5 10 *1
		1P090043		17	10CP3 1B	17	17 10CP4
		1B	07	17	10CP1 1P090044		20.7 10CP1
		1B	09	23	10CP3 1B	08	23 10CP2
		1B	28	25.88	10CP1 1B	06	28 10CP1
		1P090045		30	10CP2 1B	17	30 10CP4
		1B	19	30	10CP1 1P090046		33.7 10CP1
		1P090048		38	10 *2 1P090047		38 10 *1
		1B	25	41.7	10 *1 1N	07	45 10CP1
		1P090049		47	10CP2 1B	17	47 10CP3
090030	BEGIN MACH 0.65	3F	01	0	10CP1		10
	SPEED SCHEDULE			0	10 P3 4B	03	0 10 P2
090031	CLIMB THRU 28000 FT.	3H	02	0	10CP4 1B	25	3 10CP2
	REPORT TO ATC.	1B	17	3	10CP3 1P090050		3 10CP1
		1B	20	9	10 *1 1P090051		9 10 *1
		1P090052		12.5	10 *1 1B	25	15 10CP2
		1B	17	15	10CP3 1P090053		15 10CP1
090032	REDUCE RATE OF CLIMB	4B	03	0	10 P3 3L	01	0 10 P4
	TO 500 FT/MIN			0	10		10
090033	TUNE AND MONITOR	8B	06	0	10CP2 8B090002		6 10CP1
	SPARTANBURG VOR	5V	01	11	10CP3 5V	02	11 10CP2
	-115.7	5V	03	13.93	10CP1 5V	11	15.91 10CP1
		5V	12	18.20	10CP2 1P090065		19.6 10CP1
		1P	12	19.6	10 P1 5H	03	19.6 10CP1
		5G	05	22.5	10 P1		10
090034	LEVEL OFF AT 29000	3H	06	0	10 P2 4A	64	0 10 P2
	FT. ACCELERATE TO			0	10		10
	LONG RANGE CRUISE			0	10 4B	03	12 10 P2
	SPEED -MACH 0.67	3F	01	12	10 P3 4A	64	10 10 P3
		4B	03	20	10 P2 3F	01	20 10 P3
090035	REACH MACH 0.67	3F	01	0	10 P3 4B	03	0 10 P2
090036	CONTROL AIRCRAFT - E	4A	65	0	10 P2 8A	06	0 10 P1
	(0 SEC PROC)			0	10		10
090037	FLIGHT INSTRUMENT	3R	56	0	10 P4 3L	03	0 10 P3
	SCAN - E	3A	11	0	10 P3 3S	15	0 10 P2
090038	CONTROL AIRCRAFT - F	4A	65	0	10 P3 8A	06	0 10 P2
	(120 SEC PROC)			0	10		10
090039	FLIGHT INSTRUMENT	3R	57	0	10 P1 3L	03	0 10 P2
	SCAN - F	3A	11	0	10 P2 3S	15	0 10 P3
090040	TUNE TO GORDONVILLE	8B	06	0	10CP2 8B090003		6 10CP1
	VOR -115.6	5U	01	12	10CP3 5U	02	12 10CP3
		5U	03	15	10CP2 5U	11	18 10CP2
		5U	12	20	10CP2 1P090066		20 10CP1
		1P	12	20	10 P1 5G	04	25 10 P1
		5H	02	22.44	10CP1		10
090041	CROSS SPARTANBURG			0	10		10
	VOR. TURN TO HDG 047	3S	04	0	10 P2 4A	28	0 10 P1
090042	TURN COMPLETE - ON			0	10		10
	HDG 047.			0	10		10
090043	RECEIVE CLEARANCE TO	1B	19	0	10 *2 1P090054		0 10 *1
	CLIMB TO 33000 FT	1P090055		3.5	10 *1 1B	25	8 10CP3
		1B	17	8	10CP4 1P090056		8 10CP1
		1P090057		12	10CP1 1B	01	15 10CP2
		1B	02	15	10CP2 1B	03	17.9 10CP1
		1B	05	20	10CP1 1B	25	22 10CP3

	1B	17	22	10CP4	1P090058	22	10CP1
	1P090059		26	10CP1	1B	18	30
	1P090060		30	10 *1	1N	07	33.5
	1B	20	36	10 *2	1P090061		36
	1P090062		39.5	10 *1	1B	14	42
	1B	15	42	10CP4	1P090002		42
090044	BEGIN CLIMB TO 33000	4A	0	10 P2	3L	02	0
	FT.	3R	0	10 P4			10
090045	CLIMB THRU 32000 FT.	3H	0	10CP1	1P090067		2
	BEGIN 500 FT/MIN	1P	2	10 P4			10
	RATE OF CLIMB.			10			10
090046				10			10
090047				10			10
090048	FLIGHT INSTRUMENT	2J	0	10 P3	3L	02	0
	SCAN -A2	3A	0	10 P3	2K	14	0
		2K	0	10 P2	2K	33	0
090049	CONTROL AIRCRAFT	8A	0	10 P3	4A	68	0
	THRU TOUCHDOWN			10			10
090050	CONTROL AIRCRAFT -A1	4A	0	10 P2			10
	-ATT CWS MODE			10			10
090051	FLIGHT INSTRUMENT	2J	0	10 P2	3L	02	0
	SCAN -A1	3A	0	10 P1	2K	14	0
		2K	0	10 P1	2K	33	0
		2K	0	10 P1			10
090052	CROSS WPT SID1			10			10
090053	TURN TO HEADING 105			10			10
090054	HEADING CHANGE PROC.	4A	0	10 P1	2K	14	0
	-ATT CWS	2K	0	10 P1	3L	02	0
090055	COMPLETE TURN - ON			10			10
	HDG 105			10			10
090056	ENGAGE VERT PATH	2H	0	10 P1	2H	08	1.42
	GUIDANCE MODE	2H	2.76	10 P1	2H	36	4.13
		2H	4.91	10 P1	2H	40	6.27
		2K	7.05	10 P2			10
090057	CROSS WPT SID2. AGCS			10			10
	URNS AIRCRAFT TO			10			10
	HDG 088.			10			10
090058	REACH 10000 FT.	4B	0	10 P2	3F	01	1
	BEGIN ACCELERATION	7F	3	10 P1	7F	30	5.24
	TO 280 KIAS.			10			10
090059	HANDOFF TO ATLANTA	1R	0	10 *1	1P090069		0
	CENTER EAST DEPAR-	1P090070	4	10 *1	1R	23	6
	TURE CONTROL-123.95	1R	6	10CP1	1P090073		6
		1R	10	10CP3	1R	02	10
		1R	12.93	10CP2	1R	05	15
		1R	17	10CP3	1R	15	17
		1P090093	17	10CP1	1P090094		21
		1R	23	10 *2	1P090014		23
		1N	27	10CP1	1R	16	30
		1P090015	30	10 *1	1R	14	34
		1R	34	10CP3	1P090016		34
090060	CONTACT ATLANTA DE-	1R	0	10 *2	1P090001		0
	PARTURE CONTROL	1P090024	4.5	10 *1	1R	24	6
	-125.7	1R	6	10CP4	1P090002		6
		1R	8	10CP3	1R	08	8
		1R	10.9	10CP2	1R	06	12.48
		1R	14	10CP4	1R	15	14
		1P090003	14	10CP1	1R	16	18
		1P090005	18	10 *1	1N	07	22
		1N	22	10CP1	1R	16	25
		1P090006	25	10 *1	1R	24	28.5

090061	TUNE COMPANY FREQ	1R 37	28.5	10CP1 1P090007	28.5	10CP1
		1Q 01	0	10CP4 1Q 02	0	10CP2
		1Q 03	3	10CP2 1Q 12	5	10CP2
090062	TUNE EMERGENCY FREQ.	1Q 07	0	10CP4 1Q 08	0	10CP4
		1Q 09	2.97	10CP2	10	10
090063	CLIMB THRU 18000 FT.	3H 04	0	10CP4 3H 03	0	10CP1
	RESET ALTIMETER BARO	1P090095	0	10CP1 1P 02	0	10 P3
	VALUE TO 29.92	3H 04	3	10 P4 3H 03	3	10 P4
090064	CLIMB THRU 21000 FT.	3H 02	0	10CP3	10	10
090065	HANDOFF TO SPARTAN-	1R 24	0	10CP4 1R 15	0	10CP4
	BURG HIGH SECTOR	1P090040	0	10CP1 1R 16	5	10 *4
	-133.7	1P090074	5	10 *1 1P090075	9	10 *1
		1R 24	10	10CP3 1R 37	10	10CP2
		1P090076	10	10CP1 1R 07	14	10CP3
		1R 08	14	10CP4 1R 09	16.9	10CP2
		1R 06	19	10CP2 1R 25	20.47	10CP1
		1R 32	20.47	10CP3 1P090077	20.47	10CP1
		1P090078	23.81	10CP1 1R 32	27.5	10 *4
		1P090047	27.5	10 *1 1P090048	30.8	10 *1
		1R 24	34.3	10CP4 1R 15	34.3	10CP4
		1P090049	34.3	10CP1	10	10
090066	CROSS WPT SID3. AGCS					10
	BEGINS TURN TO HDG					10
	057.					10
090067	MON AUTO HEADING	2K 14	0	10 P2 2K 33	0	10 P1
	CHANGE MANEUVER	2K 47	0	10 P1 2K 52	0	10 P1
090068	TUNE NAV-1 TO SPAR-	8B090002	0	10CP1 5W 01	5	10CP3
	TANBURG VOR -115.7	5W 02	5	10CP2 5W 03	7.37	10CP2
		1P090096	8	10CP1 1P 02	8	10 P2
090069	TURN COMPLETE - ON					10
	HDG 057.					10
090070	BEGIN MACH 0.65	4B 07	0	10 P2 3F 01	.5	10 P3
	CLIMB.	7F 25	3	10 P1 7F 30	3	10 P1
090071	RECEIVE NOTICE OF	1R 33	0	10 *1 1P090079	0	10 *1
	CONFLICTING TRAFFIC	1P090080	3	10 *1 1P090081	7	10 *1
		1R 25	10	10CP2 1R 37	10	10CP3
		1P090082	10	10CP1 1P090083	13.3	10CP1
090072	USE ALT ENG MODE TO	2H 33	0	10 P1 2H 31	2.5	10 P1
	ESTABLISH NEW ALTI-	2H 42	3.28	10 P1 2H 34	1	10 P1
	TUDE WHILE IN VERT	2H 28	4.06	10 P1 2H 30	5.48	10 P1
	PATH MODE	2H 36	6.26	10 P1	10	10
090073	USE FPA SEL MODE TO	3L 02	0	10 P1 2H 21	1	10 P1
	CONTROL RATE OF	2H 22	2.4	10 P1 2H 26	3.17	10 P1
	CLIMB	2H 27	5.65	10 P1	10	10
090074	REACH 26000 FT					10
090075	MONITOR AUTO LEVEL	2H 25	0	10 P1 3H 02	.77	10 P3
	OFF WHILE IN ALT ENG	2K 17	2.9	10 P1 4B 02	5.17	10 P2
	MODE	7F 25	5.17	10 P4 7F 30	5.17	10 P3
		3A 10	5.17	10 P2	10	10
090076	SET MFD TO 32 NM MAP	2K 10	0	10 P1 2K 17	2.68	10 P1
090077	RECEIVE CLEARANCE TO	1R 33	0	10 *2 1P090084	0	10 *1
	CONTINUE CLIMB TO	1P090085	3.1	10 *1 1R 24	6.5	10CP4
	CRUISE ALTITUDE	1R 15	6.5	10CP4 1P090086	6.5	10CP1
		1P090087	9.5	10CP1	10	10
090078	RE-ESTABLISH VERT	2H 39	0	10 P1 2H 40	1.36	10 P1
	PATH MODE	2H 36	2.14	10 P1	10	10
		4B 07	3.7	10 P2 7F 25	3.7	10 P4
		7F 30	3.7	10 P3 3F 01	4.14	10 P3
090079	CLIMB THRU 28000 FT.	3H 02	0	10CP4 1R 24	2.37	10CP4
	REPORT TO ATC.	1R 15	2.37	10CP4 1P090050	2.37	10CP1

	1R	16	7	10 *2	1P090088	7	10 *1
	1P090089		10	10 *1	1R 25	11	10CP3
	1R	37	11	10CP4	1P090090	11	10CP1
090080 REACH 31000 FT. AC-				10			10
CELERATE TO LONG				10			10
RANGE CRUISE SPEED				10			10
-MACH 0.67				10			10
090081 REACH MACH 0.67	4B	07	0	10 P2	3F 01	.5	10 P3
	7F	25	3	10 P1	7F 30	3	10 P1
090082 RECEIVE CLEARANCE TO	1R	32	0	10 *4	1P090054	0	10 *1
CONTINUE CLIMB TO	1P090055		3.5	10 *1	1R 25	8	10CP4
CRUISE ALTITUDE	1R	38	8	10CP1	1P090056	8	10CP1
	1P090057		12	10CP1	1P 06	8	10 P2
090083 TUNE HIGH ROCK ULTRA	1R	01	0	10CP3	1R 02	0	10CP2
HIGH SECTOR -134.55	1R	03	2.93	10CP2	1R 05	4.51	10CP2
	1R	27	6	10CP1	1R 38	6	10CP1
	1P090091		6	10CP1	1P090092	9	10CP1
	1R	16	13	10 *2	1P090014	13	10 *1
	1N	07	17	10CP1	1R 16	20	10 *1
	1P090061		20	10 *1	1P090062	23.5	10 *1
	1R	27	26	10CP2	1R 36	20	10CP4
	1P090002		26	10CP1		10	10
B9EA01 ENGINE 1 FIRE				10			10
B9EA02 ENGINE FIRE SEQUENCE	7P	39	00	10 *1	1PB9EA01	.71	10 P1
- PRIMARY	1P	19	.71	10CP2	7P 47	2.21	10CP1
	7P	53	2.21	10CP1	7P 15	3.56	10CP1
	1PB9EA02		4.47	10CP1	1P 20	4.47	10 P1
	4B	08	6.47	10CP2	4A 23	8.97	10 P1
	1PB9EA04		8.97	10CP1	1P 09	8.97	10 P1
	7M	08	12.21	10CP3	1PB9EA06	13.61	10CP1
	1P	09	13.61	10 P2	7P 17	15.48	10CP2
	1PB9EA08		16.78	10CP1	1P 09	16.78	10 P1
	7P	15	21.78	10CP4	1PB9EA10	24.78	10CP1
	1P	16	24.78	10 P3	7P 18	26.91	10CP2
	7P	27	27.18	10CP2	1PB9EA11	28.68	10CP1
	1P	16	28.68	10 P4	7P 16	42.18	10CP3
	1PB9EA12		42.68	10CP1	1P 06	42.68	10 P4
B9EA03 ENGINE FIRE SEQUENCE	1R	25	00	10 P1	1R 41	00	10 P1
-NOTIFY ATC	1PB9EA13		00	10 P1	1R 35	6.8	10 *4
	1PB9EA14		3.8	10 *1	1PB9EA27	3.0	10 *1
	1R	42	22.8	10 P1	1R 41	22.8	10 P2
	1PB9EA15		22.8	10 P1	1N 05	33.8	10CP1
	1N	07	36.6	10CP2		10	10
B9EA04 ENGINE FIRE SEQUENCE	8B	02	00	10CP3	8B 05	5.9	10CP2
READ CHECKLIST	8B	03	10.9	10CP1	1PB9EA16	12.9	10CP1
PRIMARY	1P	16	14.4	10 P4	8B 03	14.4	10CP1
	1PB9EA17		16.4	10CP1	1P 16	16.4	10 P4
	8B	03	17.9	10CP1	1PB9EA18	19.9	10CP1
	1P	16	19.9	10 P4	8B 03	21.4	10CP1
	1PB9EA19		23.4	10CP1	1P 16	23.4	10 P4
	1PB9EA12		24.9	10CP1	1P 06	24.9	10 P4
B9EA05 SECONDARY ENGINE	8B	03	00	10CP1	1PB9EA20	2.	10CP1
FIRE SEQUENCE	1P	16	2.	10 P4	7D 31	3.5	10CP2
	1PB9EA21		5.35	10CP1	1P 16	5.35	10 P4
	7D	18	6.85	10CP1	1PB9EA22	9.25	10CP1
	1P	16	9.25	10 P4	7L 22	10.75	10CP1
	1PB9EA23		13.04	10CP1	1P 13	13.04	10 P3
	7C	31	16.54	10CP3	7C 35	18.89	10CP4
	7B	33	20.28	10CP2	1PB9EA24	22.0	10CP1
	1P	15	22.6	10 P3	1PB9EA25	22.6	10CP1

	1P	16	27.7	10 P4	1PB9EA26	27.7	10CP1
	1P	16	29.2	10 P4	7E	29.2	10CP1
09FE01 HYD SYS B PUMP OVHT	7A	24	0	10CP1	7A	0	10 P1
	1P010022		.53	10CP1	1P	.53	10 P3
	7A	25	1.53	10CP1	1P	1.53	10 P1
	7A	15	3.67	10CP1	7A	5.22	10CP1
	7A	24	7.17	10 P1	7A	7.17	10CP1
	7A	25	7.7	10CP1	7A	7.84	10CP1
	1P09FE01		10.39	10CP1	1P	10.39	10 P1
	1P	03	13.1	10 P1	8B	10	10CP3
	8B	05	16	10CP1	8B	26	10CP2
	1P09FE02		30	10CP1	1P	30	10 P4
	1P09FE03		32	10CP1	1P	32	10 P2
	1P	03	33.6	10 P1	8B	32	10CP1
110001 REACH 33000 FT -EN	4B	03	0	10 P2	3F	0	10 P3
ROUTE CRUISE ALTI-							10
TUDE . BEGIN ACCEL-							10
ERATION TO LONG							10
RANGE CRUISE SPEED							10
-MACH 0.71							10
110002 REPORT REACHING	1B	25	0	10CP4	1B	0	10CP1
33000 FT.	1P110001		0	10CP1	1P110002	4	10CP1
	1B	20	6	10 *3	1P110003	6	10 *1
110003 REACH MACH 0.71	3F	01	0	10 P3	4B	0	10 P2
110004 PILOT REQUESTS RE-	1B	25	0	10CP1	1B	0	10CP2
TURN TO ATLANTA .	1P110004		0	10CP1	1P110005	4	10CP1
CONTROLLER COORDI-	1B	20	6	10 *4	1P110006	6	10 *1
NATES WITH ADJACENT							10
SECTORS FOR RETURN							10
VECTORS.							10
110005 RECEIVE VECTORS FOR	1B	36	0	10 *1	1P110007	0	10 *1
THE LANIER SIX STAR,	1P110008		3.66	10 *1	1P110009	8.54	10 *1
PULASKI TRANSITION	1B	26	12	10CP1	1B	12	10CP1
	1P110010		12	10CP1	1P110011	16	10CP1
	1B	19	12	10 P2			10
110006 BEGIN TURN TO HDG	4A	28	0	10 P2	3S	5	10 P2
270	3S	01	0	10 P2	3L	0	10 P1
110007 TUNE BADIN ULTRA	1B	07	0	10CP3	1B	0	10CP2
HIGH SECTOR -135.35	1B	09	2.88	10CP1	1B	5	10CP1
	1B	28	6.5	10CP1	1B	6.5	10CP1
	1P110012		6.5	10CP1	1P110013	10	10CP1
	1B	36	13	10 *2	1P110014	13	10 *1
	1N	07	15	10CP1	1B	18	10CP2
	1P110015		18	10CP1			10
110008 SET NAV-1 TO PULASKI	8B	06	0	10CP1	8B110001	6	10CP1
VOR	5U	01	11	10CP3	5U	11	10CP3
	5U	03	14	10CP2	1P110020	16.5	10CP1
	1P	12	16.5	10 P1	5G	19	10 P1
	5H	02	16.5	10CP1			10
110009 TURN COMPLETE - ON							10
HDG 270							10
110010 RECEIVE INSTRUCTIONS	1B	19	0	10 *2	1P110016	0	10 *1
TO DESCEND TO 31000	1P110017		3.5	10 *1	1B	8	10CP3
FT	1B	17	8	10CP4	1P110018	8	10CP1
	1P110019		12	10CP1			10
110011 CONTROL A/C MAN - 1	4A	68	0	10 P4	8A	0	10 P1
110012 FLT INST SCAN - 1	3R	57	0	10 P2	3A	5	10 P1
	3L	04	0	10 P1	3S	0	10 P4
11FD01 HYD SYS B LOW PRESS.	7A	24	0	10CP1	7A	0	10 P1
	1P010022		.53	10CP1	1P	.53	10 P1

	7A	25	1.53	10CP1	1P	03	1.53	10	P1
	7A	11	3.67	10CP1	7A	13	4.22	10	CP1
	1P11FD01		4.77	10CP1	1P	02	4.77	10	P2
	1P	03	6.77	10	P1	4A	62	5	10CP2
	4A	19	6.21	10CP1	7A	20	7.26	10	CP2
	4A	06	10	10CP1	7A	06	13.33	10	CP1
	7A	08	15.28	10CP1	4D	41	16.74	10	CP1
	8B	02	20	10CP3	8B	05	26	10	CP1
	8B	03	36	10CP1	1P11FD02		38	10	CP1
	1P	15	38	10	P2	8B	03	41.7	10
	1P11FD03		43.7	10CP1	1P	16	43.7	10	P3
	8B	03	47	10CP1	1P11FD04		49	10	CP1
	1P	15	49	10	P3	8B	03	53	10
	1P11FD03		55	10CP1	1P	08	55	10	P2
	8B	08	55	10CP1				10	
11AF01	ENG NO.2 OIL FILTER			10CP1	1P11AF01		.83	10	CP1
	BYPASS			10	P4	1P	03	4	10
	7F	15	.83	10	P1	4B	02	2	10
	7F	15	.83	10	P1	4G	10	6	10
	4A	23	3	10	P1	7F	34	5.83	10
	7F	16	5	10CP1	1P	17	8	10	P1
	1P11AF02		8	10CP1				10	
	1P	03	11.5	10	P1			10	
11CB01	NO.2 CSD LOW OIL			10	*1			10	
	PRESSURE			10CP1	1P	14	.75	10	P4
	7B	73	.75	10CP2	1P	03	2.85	10	P1
	1P11CB01		.75	10CP1	1P11CB02		4.26	10	CP1
	7B	74	3.24	10	P1	7B	13	4.5	10
	7B	09	4.26	10CP1	7B	68	8.54	10	CP2
	1P	19	6.46	10CP1	7B	63	13.29	10	CP1
	7B	14	10.72	10CP1	7B	24	17.64	10	CP2
	7B	72	15.35	10CP4	7B	25	20.06	10	CP2
	7L	13	18.56	10CP2	7B	17	21	10	P2
	7B	44	21	10CP1	1P	05	27	10	CP1
	1P11CB03		21	10CP3	8B	03	39	10	CP1
	8B	02	37	10CP1	1P11CB04		43	10	CP1
	8B	03	39	10	P2	8B	03	45	10
	1P	17	45	10CP1	1P	17	51	10	P3
	1P11CB05		49	10CP1	1P09FE03		53	10	CP1
	8B	03	51	10	P2	1P	03	10	P1
	1P	08	51	10CP1				10	
	8B	08	0	10CP1	1R	38	0	10	CP2
130001	REPORT REACHING			10CP1	1P110002		4	10	CP1
	CRUISE ALT			10	*3	1P110003		5	10
	1P110001		5	10	P3	2K	17	2.13	10
130002	MON AUTO LEVEL OFF			10	P2	7F	25	7.13	10
	WHILE IN VERT PATH			10	P3	3A	10	7.57	10
	MODE			10				10	
130003	CROSS WPT LINCO			10CP2	1R	38	0	10	CP3
130004	PILOT REQUESTS RETRN			10CP1	1P110005		4	10	CP1
	TO ATLANTA. CONTROL-			10	*4	1P110006		6	10
	LER COORDINATES WITH			10				10	*1
	ADJACENT SECTOR CON-			10				10	
	TROLLERS FOR RETURN			10				10	
	VECTORS.			10				10	
130005	RECEIVE VECTORS			10	*2	1P130001		0	10
	1R	33	0	10	*1	1R	26	7	10
	1P130002		3.7	10CP4	1P130003		7	10	CP3
	1R	38	7	10				10	CP1
130006	TURN TO HDG 270			10	P1	2H	20	2.5	10
130007	HEADING CHANGE MA-			10	P1	2H	14	4.38	10
	NEUVER USING TKA SEL			10	P1	2H	42	6.56	10
	MODE -VERT PATH CUR-			10	P1	2H	29	8.76	10
	RENT MODE								P1

130008	TURN COMPLETE - ON	2K	17	12.04	10	P1			10
	HDG 270				10				10
130009	RECEIVE INSTRUCTIONS	1R	34	0	10	*1	1P130004	0	10 *1
	FOR A 4-D SHINE 01	1P130005		4.5	10	*1	1P130006	9	10 *1
	STAR	1R	26	10	10CP4	1R	39	10	10CP1
		1P130010		10	10CP1	1P130011		14	10CP1
		8B	01	17.5	10CP2				10
130010	SET UP NEW 4-D				10				10
	FLIGHT PLAN				10				10
130011	LOOK UP PAGE 2	2L	68	0	10CP1	2L	16	2.03	10CP2
		2L	68	4.11	10CP2	2L	16	5.50	10CP1
130012	LOOK UP PAGE 2 -	2L	52	0	10CP2	2L	16	12	10CP1
	STAR CALL-UP	2L	20	15	10CP2	2K	17	17	10CP1
130013	STAR NAME - SHINE 01	2L	55	1.46	10CP1	2L	44	2.81	10CP2
		2L	45	4.16	10CP2	2L	50	5.51	10CP2
		2L	41	6.86	10CP1	2L	35	8.21	10CP1
		2L	26	9.56	10CP1				10
130014	LOOK UP PAGE 2 -	2L	38	0	10CP2	2L	16	8.32	10CP1
	AWY CALL-UP	2L	20	10.66	10CP2	2K	17	12.17	10CP1
130015	AWY NAME - J815R	2L	46	1.46	10CP1	2L	33	2.81	10CP2
		2L	26	4.16	10CP3	2L	30	5.51	10CP1
		2L	54	6.86	10CP2				10
130016	SHINE 01 AND J815R	2K	17	0	10CP2				10
	DISPLAYED ON MFD.				10				10
	CO-PILOT DETERMINES				10				10
	THAT THE COMMON WPT				10				10
	ON THE STAR AND AWY				10				10
	IS THE WPT SHINE. AN				10				10
	EST MADE OF RNG AND				10				10
	BRG FROM WPT SHINE				10				10
	TO PT WHERE HDG 270				10				10
	INTCPTS J815R				10				10
130017	INITIALIZE PAGE	2L	63	0	10CP1	2L	07	1.48	10CP2
130018	DESTINATION NAME-	2L	47	3.56	10CP2	2L	37	4.91	10CP2
	KATL	2L	56	6.37	10CP2	2L	48	7.83	10CP1
130019	ATC CLRNC PAGE -				10				10
	CREATE WPT BASED ON	2L	37	0	10CP2	2L	08	15.18	10CP1
	BEARING AND RANGE	2K	17	17.52	10CP1	2L	20	19.79	10CP3
	FROM EXISTING WPT				10				10
130020	WPT01 BEARING/RANGE	2L	59	1.46	10CP1	2L	52	2.81	10CP1
	270 DEG 80 NM	2L	56	4.16	10CP1	2L	35	5.51	10CP1
		2L	26	6.86	10CP3	2L	27	8.21	10CP1
		2L	32	9.69	10CP1	2L	35	11.04	10CP1
		2L	33	12.39	10CP1	2L	35	13.83	10CP1
130021	FL INPUT - 320	2L	42	0	10CP2	2L	19	1.46	10CP2
		2L	28	3.52	10CP1	2L	27	4.87	10CP1
		2L	35	6.22	10CP1	2L	20	7.57	10CP1
130022	GS INPUT - 250	2L	49	0	10CP1	2L	19	1.47	10CP2
		2L	27	3.53	10CP1	2L	30	4.88	10CP1
		2L	35	6.23	10CP1	2L	20	7.58	10CP3
130023	WPT NAME - LAKEE	2L	48	1.46	10CP1	2L	37	2.81	10CP1
		2L	47	4.16	10CP1	2L	41	5.51	10CP1
		2L	41	6.86	10CP1				10
130024	PTA INPUT - 10:21:00	2L	56	0	10CP2	2L	26	1.46	10CP3
		2L	35	2.81	10CP1	2L	27	4.16	10CP1
		2L	26	5.51	10CP3	2L	35	6.86	10CP1
		2L	35	8.21	10CP1	2L	20	9.56	10CP3
130025	HANDOFF TO BADIN	1R	34	0	10	*2	1P130007	0	10 *1
	ULTRA HIGH SECTOR	1P130008		4	10	*1	1R	24	5 10CP3

-135.35	1R	39	5	10CP2	1P130009	5	10CP1
	1R	07	8.5	10CP3	1R	08	8.5 10CP4
	1R	09	11.4	10CP2	1R	27	13 10CP3
	1R	38	13	10CP2	1P110001	13	10CP1
	1P110002	17	10CP1	1R	32	18	10 *1
	1P110014	18	10 *1	1H	07	21	10CP1
130026 INITIATE TIME PATH	2H	35	0	10CP2	2H	39	2.15 10CP1
-4-D GUIDANCE MODE	2H	49	3.51	10CP1	2H	50	4.86 10CP1
	2K	17	5.64	10CP1	2K	23	7.91 10CP1
	2K	31	5.64	10CP1			10
130027 KEY IN WPT PPOS	2L	52	1.46	10CP1	2L	52	2.81 10CP1
	2L	51	4.16	10CP1	2L	55	5.51 10CP1
130028 WPT02 BEARING/RANGE	2L	59	1.46	10CP1	2L	52	2.81 10CP1
234 DEG 17 NM	2L	56	4.16	10CP1	2L	35	5.51 10CP1
	2L	27	6.86	10CP1	2L	27	8.21 10CP1
	2L	28	9.69	10CP1	2L	29	11.04 10CP1
	2L	26	12.39	10CP1	2L	32	13.84 10CP1
130029 KEY IN WPT SHINE	2L	55	0	10CP1	2L	44	1.35 10CP2
	2L	45	2.70	10CP1	2L	50	4.05 10CP1
	2L	41	5.40	10CP1			10
130030 ATC CLEARANCE PAGE -	2L	52	0	10CP2	2L	08	11.01 10CP1
STAR INPUT	2K	17	13.35	10CP1			
140001 CONTACT PULASKI HIGH	1B	01	0	10CP2	1B	02	0 10CP2
SECTOR -132.75	1B	03	2.9	10CP1	1B	04	5 10CP1
	1B	28	6.5	10CP2	1B	17	6.5 10CP4
	1P140001	6.5	10CP1	1P140002		10.5	10CP1
	1B	20	15	10 *4	1P140003	15	10 *1
	1N	06	19	10CP1	1B	36	23 10 *2
	1P140004	23	10 *1				10
140002 BEGIN DESCENT TO			10				10
31000FT			10				10
140003 ALTITUDE CHANGE PROC	4A	29	0	10 P2	3L	02	0 10 P1
	3H	02	0	10 P1	3R	10	0 10 P4
	4B	03	0	10 P2	3F	01	0 10 P3
140004 LEVEL OFF AT 31000			10				10
FT			10				10
140005 RECEIVE VECTOR TO	1B	36	0	10 *3	1P140005	0	10 *1
INTERCEPT PULASKI	1P140006	3.27	10 *1	1P140007		7.63	10 *1
225 RADIAL	1B	25	13	10CP3	1B	17	13 10CP4
	1P140008	13	10CP1	1P140009		17	10CP1
140006 TURN TO HDG 240			10				10
140007 HEADING CHANGE PROC.	3S	01	0	10 P2	4A	28	0 10 P2
	3L	02	0	10 P1	3S	11	0 10 P1
	3R	58	0	10 P1			10
140008 TURN COMPLETE - ON			10				10
HDG 240			10				10
140009 BEGIN TURN TO PULAS-			10				10
KI 225 RADIAL			10				10
140010 TURN COMPLETE - ON			10				10
HDG 225			10				10
140011 SET NAV-2 TO TOCCOA	8B	06	0	10CP1	8B140001	6	10CP1
VOR -109.8	5V	01	12	10CP3	5V	02	12 10CP2
	5V	03	14.93	10CP1	1P140042	17	10CP1
	1P	13	17	10CP1	5G	05	19.5 10 P1
	5H	03	17	10CP1			10
140012 HANDOFF TO LANIER	1B	18	0	10 *4	1P140010	0	10 *1
HIGH SECTOR	1B	24	4	10CP4	1B	16	4 10CP1
	1P140011	4	10CP1	1B	07	8	10CP3
	1B	08	8	10CP2	1B	09	10.88 10CP1
	1B	06	13	10CP1	1B	28	14.5 10CP3

	1B	17	14.5	10CP3	1P140012	14.5	10CP1
	1B	20	20	10 *4	1P140013	20	10 *1
	1N	07	23	10CP1	1B 36	26	10 *2
	1P140014		26	10 *1			10
140013	RECEIVE INSTRUCTIONS	1B 36	0	10 *4	1P140015	0	10 *1
	TO DESCEND TO 24000	1P140016	3.9	10 *1	1B 25	7	10CP1
	FT	1B 17	7	10CP2	1P140017	7	10CP1
	1P140018		11	10CP1			10
140014	BEGIN MACH 0.75			10			10
	DESCENT			10			10
140015	REACH 26000 FT			10			10
140016	RECEIVE CLEARANCE TO	3H 02	0	10CP1	1B 25	2	10CP2
	DESCEND TO 11000 FT.	1B 17	2	10CP3	1P140019	2	10CP1
		1B 19	7	10 *3	1P140020	7	10 *1
	1P140021		10.75	10 *1	1B 25	15	10CP3
	1B 17		15	10CP4	1P140022	15	10CP1
	1P140023		19	10CP1			10
140017	TUNE NORCROSS LOW	1B 01	0	10CP2	1B 02	0	10CP2
	SECTOR -125.2	1B 03	2.9	10CP1	1B 05	5	10CP1
		1B 28	6.5	10CP2	1B 17	6.5	10CP4
	1P140024		6.5	10CP1	1P140025	10.5	10CP1
	1B 18		14	10 *3	1P140026	14	10 *1
	1P140027		17.5	10 *1	1N 07	20	10CP1
140018	SET ALTIMETER BARO	1P140043	0	10CP1	1P 13	0	10 P2
	SETTING TO 29.80			10			10
140019	CROSS TOCCOA VOR			10			10
140020	TUNE NORCROSS VOR	8B 06	0	10CP1	8B140002	6	10CP1
	-116.6	5U 01	13.70	10CP3	5U 02	13.70	10CP3
		5U 03	16.70	10CP2	1P140044	18.78	10CP1
		1P 13	15	10 P1	5G 04	17.5	10 P1
	5H 02		20.81	10CP1			10
140021	RECEIVE INSTRUCTIONS	1B 37	0	10 *1	1P140028	0	10 *1
	TO GO INTO A HOLDING	1P140029	4	10 *1	1P140030	9.33	10 *1
	PATTERN AT LANIER	1P140031	14.66	10 *1	1B 25	16	10CP3
	INTERSECTION	1B 17	16	10CP4	1P140032	16	10CP1
	1P140033		20.5	10CP1			10
140022	REACH 17000 FT.			10			10
	BEGIN 500 FT/MIN			10			10
	RATE OF DESCENT			10			10
140023	REPORT 1000 FT TO	3H 02	0	10CP3	1P140045	2	10CP1
	LEVEL OFF	1P 11	2	10 P4			10
140024	REACH 16000 FT. BE-			10			10
	GIN DECELERATION TO			10			10
	210 KIAS.			10			10
140025	TUNE CHATTANOOGA VOR	8B 07	0	10CP1	8B140003	6	10CP1
	-115.8	5V 01	11	10CP3	5V 02	11	10CP2
		5V 03	13.93	10CP1	1P140046	16	10CP1
		1P 13	16	10 P1	5G 05	19	10 P1
	5H 03		19	10CP1			10
140026	REACH 210 KIAS.	3A 01	0	10 P3	4B 03	0	10 P2
140027	HOLDING PATTERN PROC	3S 20	0	10 P1	3S 12	0	10 P1
	-RIGHT TURNS	4A 66	0	10 P1	3L 03	0	10 P3
	-1 1/2 MIN. LEGS	3A 11	0	10 P3	3N 03	4.5	10 P1
		4B 07	7	10 P2			10
	-1 LOOP	3S 17	1	0	10 P2	4A 67	1
	-INITIATE FIRST	3S 16	1	30	10 P1	4A 65	1
		3N 04	1	30	10 P1		
	TURN OVER INTER-	3N 03	1	30	10CP1	3A 11	1
	SECTION	4B 07	1	35	10 P2	3L 03	1
		3S 17	1	30	10 P2	3N 02	2
						00	10CP1

	1P140047	2	0	10CP1	1P	11	2	00	10	P2
	3N 02	2	30	10CP1	1P140048		2	30	10	CP1
	1P 11	2	30	10	P2	3N 02	2	55	10	CP1
	1P140049	2	55	10CP1	1P	11	2	55	10	P2
	3N 04	3	00	10CP1	4A	66	3	00	10	P1
	3N 03	3	00	10	P1				10	
	3L 03	3	00	10	P3	3A 11	3	00	10	P3
	4B 07	3	05	10	P2	3S 17	4	00	10	P2
	4A 67	4	30	10	P1	3N 04	4	30	10	P1
	3S 15	4	30	10	P2				10	
	4A 65	4	30	10	P1	3N 03	4	30	10	CP1
	3A 10	4	30	10	P3	4B 07	4	35	10	P2
	3L 03	4	30	10	P4	3N 02	5	00	10	CP1
	1P140047	5	00	10CP1	1P	11	5	00	10	P2
14HLDG HOLDING PATTERN PROC	3S 20		0	10	P1	3S 12		0	10	P1
-RIGHT TURNS	3L 03		0	10	P1	3S 21		0	10	P1
-1 1/2 MIN. LEGS	3A 11		0	10	P1	3N 03		4.5	10	P1
	4B 07		7	10	P2	3H 08		0	10	P1
-1 LOOP					4A 67		1	0	10	P1
-INITIATE FIRST	3S 16	1	30	10	P1					
	3N 04	1	30	10	P1					
TURN OVER INTER-	3N 03	1	30	10	CP1					
SECTION	4B 07	1	35	10	P2					
					3N 02		2	00	10	CP1
	1P140047	2	0	10CP1	1P	11	2	00	10	P2
	3N 02	2	30	10CP1	1P140048		2	30	10	CP1
	1P 11	2	30	10	P2	3N 02	2	55	10	CP1
	1P140049	2	55	10CP1	1P	11	2	55	10	P2
	3N 04	3	00	10	CP1					
	3N 03	3	00	10	P1					
	4B 07	3	05	10	P2					
	4A 67	4	30	10	P1	3N 04	4	30	10	P1
					4B 07		4	35	10	P2
					3N 02		5	00	10	CP1
	1P140047	5	00	10CP1	1P	11	5	00	10	P2
140028 RECEIVE CLEARANCE TO	1B 36		0	10	*3	1P140034		0	10	*1
CONTINUE DESCENT AND	1P140035	3.27	10	*1	1P140036		7.63	10	*1	
APPROACH	1B 25		12	10CP1	1B 17		12	10	CP2	
	3N 03		12	10	P1			10		
	1P140037		12	10CP1	1P140038		16.5	10	CP1	
140029 BEGIN DESCENT. SET				10				10		
THRUST FLIGHT				10				10		
IDLE				10				10		
140030 REACH 11000 FT AT				10				10		
230 KIAS				10				10		
140031 HANDOFF TO ATLANTA	1B 20		0	10	*1	1P140039		0	10	*1
APPROACH CONTROL	1P140040		4	10	*1	1B 25		5	10	CP2
	1B 17		5	10CP3	1P140041			5	10	CP1
140032 ALTIMETER BARO SET	3H 04		0	10	P3	3H 03		0	10	P2
PROC.	3H 04		0	10CP3	3H 03			0	10	CP3
150001 RECEIVE INSTRUCTIONS	1R 34		0	10	*3	1P110016		0	10	*1
TO DESCEND TO 31000	1P110017		3	10	*1	1R 30		8	10	CP1
FT.	1R 39		8	10CP3	1P110018			8	10	CP1
	1P110019		12	10CP1	1R 01			13	10	CP3
	1R 02		13	10CP2	1R 03		15.93	10	CP2	
	1R 05		17.51	10CP2	1R 27			19	10	CP1
	1R 38		19	10CP1	1P140001			19	10	CP1
	1P140002		23	10CP1	1R 33			25	10	*4
	1P140003		25	10	*1	1N 07		28	10	CP1
150002 USE ALT ENG MODE TO	2H 33		0	10	P1	2H 31		2.47	10	P1

	ESTABLISH NEW ALTI-	2H	51	5.73	10 P1 2H	34	4.31	10 P1
	TUDE WHILE IN TIME	2H	28	4.31	10 P1 2H	30	6.51	10 P1
	PATH MODE	2H	42	7.29	10 P1 2H	36	8.07	10 P1
		2H	44	8.85	10 P1			10
150003					10			10
150004	REVISE FLIGHT PLAN	2L	65	0	10CP1 2L	09	2.03	10CP1
	TO ESTABLISH NEW	2L	24	4.37	10CP1 2L	24	5.87	10CP2
	FLIGHT LEVEL 310 AT	2L	09	7.19	10CP2 2L	42	9.27	10CP1
	SPT01	2L	28	10.62	10CP2 2L	26	12.08	10CP3
		2L	35	13.43	10CP1 2L	20	14.78	10CP1
		2L	09	16.25	10CP2 2L	21	18.33	10CP3
		1P150012		20	10CP1 1P	02	20	10 P2
150005	ADJUST THRUST TO FLY	2K	17	0	10 P1 2K	31	0	10 P1
	AIRPLANE SYMBOL ON	4B	07	0	10 P2 2K	24	0	10 P3
	MFD INTO TIME BOX	2K	32	5.13	10 P1 2K	17	10	10 P1
		2K	31	10	10 P1 4B	07	10	10 P2
		2K	32	12	10 P1			10
150006	RE-ESTABLISH TIME	2H	39	0	10 P1 2H	49	2.92	10 P1
	PATH -4-D MODE	2H	50	4.27	10 P1 2H	32	5.05	10 P1
		2H	44	5.83	10 P1 2H	38	2.14	10 P1
		2H	42	6.61	10 P1 2H	40	1.36	10 P1
150007	LEVEL OFF AT 31000				10			10
	FT				10			10
150008	HANDOFF TO LANIER	1R	16	0	10 *2 1P140010		0	10 *1
	HIGH SECTOR -132.4	1R	14	4	10CP4 1R	15	4	10CP3
		1P140011		4	10CP1 1R	07	8	10CP3
		1R	08	8	10CP4 1R	09	10.9	10CP2
		1R	06	12.48	10CP2 1R	27	14	10CP4
		1R	15	14	10CP4 1P140012		14	10CP1
		1R	33	19	10 *4 1P140013		19	10 *1
		1N	07	22	10CP1			10
150009	BEGIN TURN TO HDG				10			10
	234 TO ACQUIRE J815R				10			10
150010	TURN COMPLETE - ON				10			10
	AWY J815R				10			10
150011	AGCS BEGINS PROGRAM-				10			10
	MED DESCENT TO 11000				10			10
	FT. THRUST ADJUSTED				10			10
	AUTOMATICALLY.				10			10
150012	RECEIVE INSTRUCTIONS	1R	32	0	10 *2 1P150001		0	10 *1
	FROM ATC	1P150002		4	10 *1 1R	25	7	10CP3
		1R	37	7	10CP4 1P150003		7	10CP1
150013	SET ALTIMETER BARO	1P150013		0	10CP1 1P	15	0	10 P1
	SETTING TO 29.88				10			10
150014	CROSS WPT SHINE.				10			10
	AGCS BEGIN AUTO				10			10
	TURN TO HDG 211				10			10
150015	TURN COMPLETE - ON				10			10
	HDG 211				10			10
150016	DESCEND THRU 26000	1R	24	0	10CP4 1R	15	0	10CP4
	FT. REPORT TO ATC.	1P140019		0	10CP1 1R	34	5	10 *4
	HANDOFF TO NORCROSS	1P150005		5	10 *1 1P150006		8	10 *1
	LOW SECTOR -125.2	1R	30	10	10CP2 1R	39	10	10CP4
		1P150007		10	10CP1 1R	01	14	10CP3
		1R	02	14	10CP2 1R	03	16.93	10CP2
		1R	05	18.51	10CP2 1R	27	20	10CP1
		1R	38	20	10CP1 1P140024		20	10CP1
		1P140025		24	10CP1 1R	33	27	10 *4
		1P140013		27	10 *1 1N	07	30	10CP1
150017	CROSS WPT LANDS.				10			10

	AGCS BEGINS PROGRAM-			10		10
	MED TURN TO HDG 228			10		10
150018	TURN COMPLETE - ON			10		10
	HDG 228			10		10
150019	LEVEL OFF AT 11000			10		10
	FT			10		10
150020	MONITOR AUTO LEVEL	3H	02	0	10 P3 2K 14	2.13 10 P1
	OFF WHILE IN TIME	3L	01	4.4	10 P1	10
	PATH MODE			10		10
150021	AGCS BEGINS PROGRAM-			10		10
	MED DECELERATION TO			10		10
	250 KIAS.			10		10
150022	REACH 250 KIAS			10		10
150023	RECEIVE INSTRUCTIONS	1R	35	0	10 *1 1P150009	0 10 *1
	TO CHANGE LAKESIDE	1P150010		4	10 *1 1R 30	9 10CP1
	PTA TO 10:22:15	1R	39	9	10CP3 1P150011	9 10CP1
150024	REVISE FLIGHT PLAN	2L	65	0	10CP1 2L 09	2.03 10CP1
	TO CHANGE LAKESIDE	2L	24	4.37	10CP1 2L 24	5.87 10CP2
	PTA	2L	09	7.19	10CP1 2L 56	9.53 10CP1
		2L	26	10.88	10CP1 2L 35	12.33 10CP1
		2L	27	13.68	10CP1 2L 27	15.03 10CP1
		2L	26	16.38	10CP3 2L 30	17.73 10CP1
		2L	20	19.08	10CP2 2L 09	20.59 10CP1
		2L	21	22.93	10CP4 1P150014	24.45 10CP1
		1P	02	24.45	10 P3	10
150025	MONITOR AIRCRAFT AND	2K	17	0	10 P1 2K 31	0 10 P1
	TIME BOX SYMBOLS ON			10		10
	MFD AS AGCS ADJUSTS			10		10
	SPEED TO ACQUIRE NEW			10		10
	TIME SLOT			10		10
150026	REACH 220 KIAS			10		10
150027	HANDOFF TO ATLANTA	1R	16	0	10 *4 1P140039	0 10 *1
	APPROACH CONTROL	1P140040		4	10 *1 1R 24	6 10CP4
	-126.9	1R	40	6	10CP1 1P140041	6 10CP1
160001	TUNE ATLANTA	1B	07	0	10CP3 1B 08	0 10CP2
	APPROACH CONTROL	1B	09	2.88	10CP1	10
	-126.9			10		10
160000	TURN ON LANDING LTS	7G	17	0	10CP2	10
160002	TUNE ATIS -123.7	1A	07	0	10CP3 1A 08	0 10CP2
		1A	09	2.98	10CP1 1A 06	5 10CP1
		1A	17	6.43	10CP2 1A 15	8 10 *3
		1P160001		8	10 *1 1P160002	11.42 10 *1
		1P160003		15.98	10 *1 1P160004	20.54 10 *1
		1P160005		25.1	10 *1 1P160006	29.66 10 *1
160003	SET ALTIMETER BARO	1P160043		0	10CP1 1P 13	0 10 P3
	SETTING TO 29.84			10		10
160004	CONTACT ATLANTA AP-	1A	06	0	10CP1 1A 10	2.4 10CP4
	PROACH CONTROL	1A	12	2.4	10CP3 1P160007	2.4 10CP1
		1P160008		6.4	10CP1 1A 15	9 10 *4
		1N	07	12	10CP1 1P160009	9 10 *1
160005	DESCENT AND APPROACH	1P160043		0	10 P1 1P 02	0 10CP2
	CHECKLIST - 1	8B	02	2	10CP3 8B 05	8 10CP2
		8B	03	13	10CP1 1P160044	15 10CP1
		1P	10	15	10 P1 1P160045	17 10CP1
		1P	07	17	10 P4 8B 03	18 10CP1
		1P160046		20	10CP1 1P 13	20 10 P4
		7D	69	22	10CP1 7D 70	24.67 10CP1
		7E	08	26.69	10CP1 1P160047	28 10CP1
		1P	16	28	10 P1	10
160006	DESCENT AND APPROACH	8B	03	0	10CP1 1P160048	2 10CP1

CHECKLIST - 2	1P 11	2	10 P3 7M 03	3	10 P3
	7M 06	6.54	10 P4 1P160049	8.5	10 P1
	1P 06	8.5	10CP4 8B 03	9	10CP1
	1P160050	11	10CP1 1P 12	11	10 P4
	7G 17	12	10CP2 1P160051	14.2	10CP1
	1P 16	14.2	10 P2 8B 03	14.5	10CP1
	1P160052	16.5	10CP1 1P 12	16.5	10 P2
	3H 02	18	10CP4 3H 05	20.37	10CP1
	1P160053	23.4	10CP1 1P 09	23.40	10 P1
160007 DESCENT AND APPROACH	8B 03	0	10CP1 1P160054	2	10CP1
CHECKLIST - 3	1P 02	2	10 P1 8B010004	2	10CP1
	8B160001	5	10CP1 7F 26	10	10CP4
	7F 27	10.32	10CP1 7F 28	12.32	10CP4
	7F 29	12.64	10CP1 8B160002	15	10CP1
			3A 05	20	10CP2
	1P160055	20	10CP1 1P 14	20	10 P1
	3A 07	22	10 P2 3A 05	22	10 P3
	3A 13	25	10 P1 3A 12	25	10CP1
	1P160056	28	10CP1 1P 08	28	10 P2
	8B 03	29.6	10CP1 1P160057	29.6	10CP1
	1P 02	31.6	10 P4 8B 08	31.6	10CP1
	8B010005	34.6	10CP1	10	
160008 CROSS NORCROSS VOR.	1B 18	0	10 *3 1P160010	0	10 *1
RECEIVE INSTRUCTIONS	1P160011	4	10 *1 1B 25	6	10CP1
TO TURN TO HDG 210	1B 17	6	10CP2 1P160012	6	10CP1
AND TO SLOW TO 200		10		10	
KIAS		10		10	
160009 TURN TO HDG 210 AND		10		10	
SLOW TO 200 KIAS		10		10	
160010 TURN COMPLETE - ON		10		10	
HDG 210		10		10	
160011 SET FLAPS TO FLAPS 1	1P160058	0	10 P1 1P 10	0	10CP2
	4E 07	1	10CP1 4E 15	3.69	10CP3
	4N 03	5.92	10CP2 4N 04	7.09	10CP2
	1P160058	8.26	10CP1 1P 10	5	10 P2
	7F 30	7	10 P3 7F 25	7	10 P4
160012 REACH 200 KIAS	4B 07	0	10 P2	10	
160013 SET NAV-1 TO RUNWAY	8B 06	0	10CP1 8B160003	6	10CP1
08 ILS -109.9	5U 01	11	10CP3 5U 02	11	10CP3
	5U 03	14	10CP2 1P160059	16.5	10CP1
	1P 12	16.5	10 P1 5G 04	19	10 P1
	5H 02	16.5	10CP1	10	
160014 SET NAV-2 TO REG VOR	5V 01	0	10CP3 5V 02	0	10CP2
-111.8	5V 03	2.93	10CP1 1P160060	5	10CP1
	1P 02	5	10 P2 5G 05	7	10 P1
	5H 03	5	10CP1	10	
160015 RECEIVE INSTRUCTIONS	1B 37	0	10 *2 1P160014	0	10 *1
TO SLOW TO 190 KIAS	1B 14	4	10CP2 1B 15	4	10CP2
	1P160015	4	10CP1	10	
160016 REDUCE SPEED	4B 07	0	10 P2	10	
160017 SET FLAPS TO FLAPS 5	1P160061	0	10 P1 4E 09	1	10CP3
	1P160061	5	10CP1	10	
160018 FLAP SET PROCEDURE	1P 10	0	10CP2	10	
	4E 15	2.69	10CP3 4E 16	4.71	10CP1
	4N 03	3.69	10CP2 4N 04	4.86	10CP2
	1P 10	6.03	10 P2 7F 25	7	10 P4
	7F 30	7.44	10 P3	10	
160019 HANDOFF TO APPROACH	1B 20	0	10 *1 1P160016	0	10 *1
CONTROL -127.25	1P160017	4	10 *1 1B 26	6	10CP2
	1B 32	6	10CP2 1P160018	10	10CP1

	1B	01	10	10CP2	1B	02	10	10CP2
	1B	03	12.88	10CP1	1B	05	15	10CP1
	1B	28	16.5	10CP4	1B	32	16.5	10CP1
	1P160019		16.5	10CP1	1P160020		20	10CP1
	1B	19	22	10 *4	1P160021		22	10 *1
	1N	07	26	10CP1			10	10
160020	RECEIVE INSTRUCTIONS	1B	19	0	10 *2	1P160022	0	10 *1
	TO TURN TO HDG 270,	1P160023	4	10 *1	1B	25	8	10CP3
	REDUCE SPEED TO 170,	1B	17	8	10CP4	1P160024	8	10CP1
	AND TO DESCEND TO	1P160025	12	10CP1			10	10
	4500 FT.		10	10			10	10
160021	BEGIN TURN TO HDG		10	10			10	10
	270		10	10			10	10
160022	TURN COMPLETE - ON	4B	07	0	10 P2		10	10
	HDG 270. BEGIN DE-			10			10	10
	CELERATION TO 170.			10			10	10
160023	REACH 170 KIAS			10			10	10
160024	BEGIN DESCENT TO			10			10	10
	4500 FT.			10			10	10
160025	SET FLAPS TO FLAPS	1P160062	0	10 P1	4E	11	1	10CP3
	15	1P160062	5	10CP1			10	10
160026	LEVEL OFF AT 4500 FT		10	10			10	10
160027	RECEIVE INSTRUCTIONS	1B	37	0	10 *2	1P160063	0	10 *1
	TO SLOW TO 160 KIAS.	1B	14	4	10CP2	1B	15	4
		1P160064	4	10CP1			10	10
160028	REDUCE THRUST	4B	07	0	10 P2		10	10
160029	REACH 160 KIAS	4B	07	0	10 P2		10	10
160030	RECEIVE INSTRUCTIONS	1B	18	0	10 *4	1P160026	0	10 *1
	TO TURN TO HDG 180	1B	26	4	10CP2	1B	32	4
		1P160027	4	10CP1			10	10
160031	TURN TO HDG 180		10	10			10	10
160032	TURN COMPLETE - ON		10	10			10	10
	HDG 180		10	10			10	10
160033	RECEIVE FINAL	1B	37	0	10 *3	1P160028	0	10 *1
	APPROACH INSTRUCTION	1P160029	3.21	10 *1	1P160030		7.49	10 *1
		1P160031	11.77	10 *1	1B	26	15	10CP1
		1B	17	15	10CP1	1P160032	15	10CP1
		1P160033	19	10CP1			10	10
160034	TUNE ATLANTA TOWER	1B	07	0	10CP3	1B	08	0
	-119.5	1B	09	2.88	10CP1		10	10
160035	BEGIN TURN TO HDG		10	10			10	10
	120		10	10			10	10
160036	TURN COMPLETE - ON		10	10			10	10
	HDG 120		10	10			10	10
160037	CAPTURE ILS LOC	3R	59	0	10CP1	1P160067	2.6	10CP1
	BEGIN TURN TO	1P	02	2.6	10 P4	3R	16	0
	HDG 090	3S	01	0	10 P2	4A	28	0
		1P	02	6.50	10CP2	3S	11	6.53
				10	1P160068		6.53	10 P1
		3V	06	4	10 P1	3R	16	10
		3S	01	10	10 P2	4A	28	10
160038	SET DECISION HEIGHT		10	10			10	10
	ON RADIO ALTIMETER		10	10			10	10
160039	SET ADF-1 TO LAKE-	5D	17	0	10CP3	5D	22	3
	SIDE -375KC	5D	01	3.77	10CP2	5D	02	5.75
		1P160065	7.73	10CP1	1P	02	7.73	10 P1
160040	SET ADF-2 TO LAKE-	5E	17	0	10CP2	5E	01	3
	SIDE -375	5E	02	3	10CP3	5E	20	3
		1P160066	5	10CP1	1P	02	5	10 P1
160041	MON VOR/RMI-1	5G	04	0	10 P2	5G	05	0
								10 P2

160042	MON ADF/RMI-1	5D	28	0	10 P2	5D	29	0	10 P2
160043	TUNE NAV-1 TO RWY 08	5U	01	0	10CP3	5U	02	0	10CP3
	ILS -109.9	5U	03	3	10CP2	1P160069		5	10CP1
		1P	02	5	10 P1				10
160044	TURN COMPLETE - ON				10				10
	HDG.090 -RWY 08 HDG				10				10
160045	ANNUNCIATOR RECALL	7A	28	0	10CP1	7A	36	2.28	10CP1
160046	CONTROL AIRCRAFT ON	3R	16	0	10 P3	3S	01	0	10 P2
	FINAL APP - A (10)	4A	30	0	10 P2	3A	10	0	10 P1
		3L	02	0	10 P1	3H	06	0	10 P2
		3N	05	0	10 P2				
160047	MON INSTRUMENTS ON	3R	62	0	10CP1	3S	04	0	10CP2
	FINAL APP	3R	63	0	10CP1	3A	10	0	10CP2
		3H	07	0	10CP1	3L	02	0	10CP2
160048	MON ADF/RMI-2	5E	26	0	10CP1				10
160049	MON RADIO ALTIMETER	3J	01	0	10CP1				10
160050	RECEIVE INSTRUCTIONS	1B	18	0	10 *4	1P160034		0	10 *1
	TO SLOW TO 150	1B	14	4	10CP2	1B	15	4	10CP2
		1P160035		4	10CP1				10
160051	REDUCE SPEED TO 150	4B	07	0	10 P2	3A	01	0	10 P1
	KIAS				10				10
160052	REACH 150 KIAS	3A	01	0	10 P1	4B	07	0	10 P2
160053	SET FLAPS TO FLAPS	1P160070		0	10 P1	4E	12	1	10CP1
	25	1P160070		5	10CP1				10
160054	ACQUIRE GLIDESLOPE	3R	60	2	10 P1	3R	60	0	10CP1
		1P160071		2.6	10CP1	1P	10	2.6	10 P1
		3V	09	4.58	10 P1				10
160055	RECEIVE INSTRUCTIONS	1B	18	0	10 *4	1P160036		0	10 *1
	TO MAINTAIN CURRENT	1B	14	8	10CP4	1B	20	8	10CP3
	SPEED	1P160037		8	10CP1				10
160056	BEGIN DECELERATION	1P160072		0	10CP1	1P	10	0	10 P1
	TO 135 KNOTS	4B	07	1	10 P2	3A	01	1	10 P1
160057	SET FLAPS TO FLAPS	1P160073		0	10 P1	4E	14	1	10CP1
	40	1P160073		5	10CP1				10
160058	REPORT RUNWAY IN	8A	01	0	10CP1	1P160074		2	10CP1
	SIGHT	1P	10	2	10 P1	8A	06	2	10 P3
160059	CROSS RWY 08 OUTER	3V	11	0	10 P2	1P160075		2	10 P1
	MARKER	1P	13	2	10CP4	3N	03	0	10 P1
160060	EXTEND LANDING GEAR	4D	03	0	10CP3	4D	05	3	10CP2
		4D	09	3.5	10CP3				10
160061	CONTACT TOWER FOR	1B	05	0	10CP4	1B	25	2.4	10CP1
	FINAL LANDING CLEAR-	1B	17	2.4	10CP2	1P160038		6.4	10CP1
	ANCE	1B	19	10.4	10 *2	1P160040		10.4	10 *1
		1P160041		14.4	10 *1	1B	29	17.4	10CP1
		1B	15	17.4	10CP4	1P160037		17.4	10CP1
160062	LANDING CHECKLIST	8B090001		0	10CP1	1P160076		2	10CP1
		1P	10	2	10 P4	1P160077		2.6	10CP1
		1P	14	2.6	10 P2	8B090001		3	10CP1
		1P160078		5	10CP1	1P	10	5	10 P2
		1P160079		6	10 P1	1P	02	6	10CP4
		8B090001		7.5	10CP1	1P160080		9.5	10CP1
		1P	10	9.5	10 P2	1P160081		10.2	10CP1
		1P	10	10.2	10 P1	8B090001		11.2	10CP1
		1P160082		13.2	10CP1	1P	14	13.2	10 P2
		1P160083		13.6	10CP1	1P	12	13.6	10 P4
		1P160084		16.1	10CP1	1P	12	16.1	10CP4
160063	DESCEND THRU 500 FT	1P160085		0	10CP1	1P	14	0	10 P3
	ABOVE RWY				10				10
160064	CROSS RWY 08 MIDDLE	3V	13	0	10 P1	3V	13	0	10CP1
	MARKER				10				10

160065	DESCEND THRU	3R	12	0	10CP3	1P160086	2.58	10CP1
	-DECISION HEIGHT	1P	11	2.58	10 P2			10
160066	CONTROL AIRCRAFT	4A	68	0	10 P1			10
	THRU TOUCHDOWN				10			10
160067	CROSS END OF RWY 08			0	10 P1	4A	31	0
160068	TOUCHDOWN	4B	08	0	10 P2	4C	02	24
		4C	01	2.5	10 P3	4M	04	0
		4F	01	28	10 P1			10
		8A	02	0	10 P3	4F	07	0
160069	SET SPEED BRAKES	4F	02	0	10CP1	4D	40	2.62
160070	SET AUTO BRAKES	4D	43	0	10 *3	1P160087		0
160071	HANDOFF TO GROUND	1B	18	0	10 *1	1B	14	6
	CONTROL -121.9	1P160088		3.5	10CP2	1P160089		6
		1B	15	6	10CP3	1B	02	9
		1B	01	9	10CP1	1B	05	14
		1B	03	11.88	10CP2	1B	16	15.5
		1B	29	15.50	10CP1	1B	18	20
		1P160090		15.5	10 *1	1P160092		23.5
		1P160091		20	10CP1	1B	15	25
		1B	29	25	10CP1			10
		1P160037		25	10 P4	3S	04	0
160072	CONTROL AIRCRAFT ON	3R	16	0	10 P4	3A	14	0
	FINAL APP - B(240)	4A	30	0	10 P4	3H	07	0
		3L	04	0	10 P3			0
		3N	05	0	10 P1	3R	61	0
160073	CONTROL A/C ON FINAL	4A	30	0	10 P2	3A	10	0
	APPROACH - C (5)	3S	04	0	10 P2	3H	07	0
		3L	02	0	10 P1			0
		3N	05	0	10 P1	4D	40	2.62
160074	SET AUTO BRAKES	4D	43	0	10 P4	8A	08	00
160075	MAN CNTRL A/C	4A	31	00	10CP1	1P160067		0
160076	CAPTURE LOC	3R	59	0	10 P1	3V	06	2.0
		1P	02	2.6	10CP3	3S	17	0
160077	MON INSTRUMENTS ON	3R	62	0	10CP3	3A	10	0
	FINAL APP - CP	3R	63	0	10CP3	3L	02	0
		3H	06	0	10CP4	3S	15	0
160078	MON INSTRUMENTS ON	3R	62	0	10CP4	3A	10	0
	FINAL APP - CP	3R	63	0	10CP4	3L	02	0
		3H	06	0	10 P2	3S	01	0
160079	MON INSTRUMENTS ON	3R	62	0	10 P2	3A	10	0
	FINAL APP - P	3R	63	0	10 P2	3L	02	0
		3H	06	0	10 P3	3S	17	0
		3R	64	0	10 P3	3A	10	0
160080	MON INSTRUMENTS ON	3R	62	0	10 P3	3L	02	0
	FINAL APP - P	3R	63	0	10 P4	3S	15	0
		3H	06	0	10 P4	3A	10	0
		3R	64	0	10 P4	3L	02	0
160081	MON INSTRUMENTS ON	3R	62	0	10 P3	3R	62	0
	FINAL APP - P	3R	63	0	10 P1	3A	10	0
		3H	06	0	10 P2	3L	02	0
		3S	01	0	10 P2			10
160082	CONTROL A/C ON FINAL	4A	69	0	10 P4	3R	62	0
	APPROACH - PILOT	3R	63	0	10 P1	3A	10	0
	(30 SEC)	3H	06	0	10 P2	3L	02	0
		3S	01	0	10 P4	3R	62	0
160083	CONTROL A/C ON FINAL	4A	69	0	10 P1	3A	10	0
	APPROACH - PILOT	3R	63	0	10 P2	3L	02	0
	(60 SEC)	3H	06	0	10 P2			10
		3S	01	0	10CP1	3R	62	0
160084	CONTROL A/C ON FINAL	4A	78	0				10CP3

APPROACH - CO-PILOT	3R	63	0	10CP3	3A	10	0	10CP3
	3H	06	0	10CP3	3L	02	0	10CP3
	3S	17	0	10CP1				10
160085 CONTROL A/C ON FINAL	4A	78	0	10CP2	3R	62	0	10CP4
APPROACH - CO-PILOT	3R	63	0	10CP4	3A	10	0	10CP4
	3H	06	0	10CP4	3L	02	0	10CP4
	3S	15	0	10CP1				10
160086 CONTACT TOWER FOR	1B	05	0	10 P4	1B	25	2.4	10 P1
FINAL LANDING CLEAR-	1B	17	2.4	10 P2	1P160038		6.4	10 P1
ANCE	1P	17	10.4	10 *3	1P160040		10.4	10 *1
	1P160041		14.4	10 *1	1B	29	16	10 P1
	1B	15	16	10 P4	1P160037		16	10 P1
160087 LANDING CHECKLIST	8B090001		0	10 P1	1P160076		2	10 P1
	1P	10	2	10CP4	1P160077		2.6	10 P1
	1P	14	2.6	10CP2	8B090001		3	10 P1
	1P160078		5	10 P1	1P	10	5	10CP2
	1P160079		6	10CP1	1P	02	6	10 P4
	8B090001		7.5	10 P1	1P160080		9.5	10 P1
	1P	10	9.5	10CP2	1P160081		10.2	10 P1
	1P	10	10.2	10CP1	8B090001		11.2	10 P1
	1P160082		13.2	10 P1	1P	14	13.2	10CP2
	1P160083		13.6	10 P1	1P	12	13.6	10CP4
	8B090001		14.1	10 P1	1P160084		16.1	10 P1
	1P	12	16.1	10CP4			10	
160088 CONTROL AIRCRAFT - A	4A	64	0	10 P3	3R	64	0	10 P1
(5 SEC PROC)								
160089 CONTROL AIRCRAFT - B	4A	64	0	10 P2	3R	64	0	10 P2
(10 SEC PROC)								
160090 CONTROL AIRCRAFT - C	4A	64	0	10 P4	3R	64	0	10 P3
(30 SEC PROC)								
160091 CONTROL AIRCRAFT - D	4A	65	0	10 P1	3R	64	0	10 P4
(60 SEC PROC)								
160092 CONTROL AIRCRAFT - E	4A	65	0	10 P4	3R	65	0	10 P1
(60 SEC PROC)								
160093 CONTROL AIRCRAFT - F	4A	65	0	10 P3	3R	65	0	10 P2
(120 SEC PROC)			10				10	
160094 CONTROL AIRCRAFT	4A	68	0	10 P1	8A	06	0	10 P3
THRU TOUCHDOWN								
160095 REPORT RUNWAY IN	8A	01	0	10CP1	1P160074		2	10CP1
SIGHT	1P	10	2	10 P1	8A	01	2	10 P3
16AF01 MONITOR A/C ON FINAL	3R	64	0	10 P1	3R	61	0	10 P2
APPROACH - (5)	3S	04	0	10 P2	3A	10	0	10 P2
	3L	02	0	10 P2	3H	07	0	10 P1
	3H	05	0	10 P1				
16AF02 MONITOR AIRCRAFT ON	3R	16	0	10 P3	3S	01	0	10 P2
FINAL APP - (10)	3R	64	0	10 P2	3A	10	0	10 P1
	3L	02	0	10 P1	3H	06	0	10 P2
	3H	05	0	10 P2				
16AF03 MONITOR AIRCRAFT ON	3R	16	0	10 P4	3S	04	0	10 P4
FINAL APP - (240)	3R	64	0	10 P4	3A	14	0	10 P3
	3L	04	0	10 P4	3H	07	0	10 P2
	3H	05	0	10 P3				
16AF04 MON INSTRUMENTS ON	3R	64	0	10 P2	3S	01	0	10
FINAL APP - P	3A	10	0	10 P1				
	3H	06	0	10 P2	3L	02	0	10 P1
	3R	64	0	10 P2				
16AF05 MON INSTRUMENTS ON	3R	64	0	10 P3	3S	17	0	10 P1
FINAL APP - P	3A	10	0	10 P3				
	3H	06	0	10 P3	3L	02	0	10 P3
	3R	64	0	10 P3				

16AF06	MON INSTRUMENTS ON	3R	64	0	10 P2	3S	15	0	10 P1
	FINAL APP - P	3A	10	0	10 P4				
		3H	06	0	10 P4	3L	02	0	10 P4
		3R	64	0	10 P4				
16EK00	PILOT INCAPACITATION				10				10
16EK01	ADVISE APPROACH CON-	1B	26	0	10CP3	1B	32	0	10CP3
	TROL OF PILOT INCA-	1P16EK01		0	10CP1	1P16EK02		3	10CP1
	PACITATION	1P16EK03		7	10CP1	1B	19	12	10CP1
		1P16EK04		12	10CP1	1P16EK05		15	10CP1
		1P16EK06		19	10CP1				10
16EK02	CONTROL AIRCRAFT -A1	4A	72	0	10CP2	8A	03	0	10CP2
		3R	10	0	10CP1	3A	10	0	10CP2
		3L	02	0	10CP1	3A	10	0	10CP1
		4B	07	0	10CP1				10
16EK03	COMPLETE TURN. BEGIN				10				10
	DECELERATION.				10				10
16EK04	REACH 170 KIAS. SET				10				10
	THRUST TO FLIGHT				10				10
	IDLE.				10				10
16EK05	BEGIN DESCENT TO				10				10
	4500 FT.				10				10
16EK06	ALTITUDE CHANGE	4A	72	0	10CP2	3L	02	0	10CP1
	PROCEDURE - A	3H	02	0	10CP1	3R	10	0	10CP4
		4B	07	0	10CP1	3F	01	0	10CP3
		4E	11	0	10CP4				10
16EK07	SET FLAPS 15	4E	15	3	10CP3	4N	05	6.40	10CP1
16EK08	FLAP SET PROC. - A	4E	15	0	10CP2	8A	09	0	10CP1
16EK09	CONTROL AIRCRAFT -F1	4A	73	0	10CP1	3S	15	0	10CP3
		3R	57	0	10CP2	3A	11	0	10CP2
		3L	03	0	10CP4	8A	09	0	10CP2
16EK10	CONTROL AIRCRAFT -D1	4A	72	0	10CP3	3S	15	0	10CP1
		3R	56	0	10CP4	3A	10	0	10CP4
		3L	02		10				10
16EK11	LEVEL OFF AT 4500 FT			0	10CP3	8A	09	0	10CP4
16EK12	CONTROL AIRCRAFT	4A	72	0	10CP3	3S	15	0	10CP4
		3R	57	0	10CP2	3A	11	0	10CP4
		3L	04	0	10CP1				10
16EK13	REDUCE THRUST	4B	07	0	10CP1				10
16EK14	REACH 160 KIAS	4B	07	0	10CP3	5H	03	0	10CP3
16EK15	MON VOR/RMI-2	5H	02	0	10CP2	5E	27	0	10CP2
16EK16	MON ADF/RMI-2	5E	26		10				10
16EK17	BEGIN TURN TO HDG				10				10
	150				10				10
16EK18	HEADING CHANGE PROC-	3S	01	0	10CP2	4A	74	0	10CP2
	A	3L	02	0	10CP1	3S	11	5	10CP3
		3R	58	0	10CP1				10
16EK19	TURN COMPLETED - ON				10				10
	HDG 180.				10				10
16EK20	CONTROL AIRCRAFT -B1	4A	72	0	10CP1	8A	09	0	10CP3
		3R	56	0	10CP1	3L	02	0	10CP2
		3A	10	0	10CP2	3S	01	0	10CP3
16EK21	BEGIN TURN TO HDG				10				10
	120				10				10
16EK22	TURN COMPLETED - ON				10				10
	HDG 120				10				10
16EK23	CAPTURE ILS LOCALI-	3R	59	0	10CP1	3R	16	0	10CP3
	ZER. BEGIN TURN TO	3S	04	0	10CP3	4A	74	0	10CP2
	HDG 090.	3R	16	10	10CP3	3S	04	10	10CP3
		4A	74	10	10CP2	3S	11	5	10CP3
		3V	06	0	10CP1				10
16EK24	TURN COMPLETED - ON				10				10
	HDG 090 -RWY 08 HDG				10				10

16EK25	CONTROL AIRCRAFT ON	3R	16	0	10CP3	3S	04	0	10CP3
	FINAL APPROACH - A1	4A	75	0	10CP2	8A	03	0	10CP2
16EK26	CONTROL AIRCRAFT ON	3R	16	0	10CP4	3S	04	0	10CP3
	FINAL APPROACH - B1	4A	75	0	10CP4	8A	03	0	10CP3
16EK27	REDUCE SPEED TO 150	4B	07	0	10CP1				10
	KIAS.				10				10
16EK28	REACH 150 KIAS	4B	07	0	10CP1				10
16EK29	SET FLAPS 25	4E	12	0	10CP1				10
16EK30	ACQUIRE GLIDE SLOPE	3V	09	0	10CP1	3R	60	0	10CP1
16EK31	CROSS STUBBS. BEGIN	4B	07	0	10CP1				10
	DECELERATION TO 135				10				10
	KIAS.				10				10
16EK32	SET FLAPS 40	4E	14	0	10CP1				10
16EK33	CROSS OUTER MARKER	3V	11	0	10CP1				10
16EK34	SET SPEED BRAKES	4F	02	0	10CP2				10
		4F	07	4	10CP3				10
16EK35	LANDING CHECKLIST -	8B090001		0	10CP1	1P160076		2	10CP1
	PILOT INCAPACITATED	1P160077		2.6	10CP1	8B090001		3	10CP1
		1P160078		5	10CP1	1P160079		5.7	10CP1
		8B090001		7	10CP1	1P160080		9	10CP1
		1P160081		9.7	10CP1	8B090001		13.7	10CP1
		1P160082		14.1	10CP1	1P160083		14.1	10CP1
		8B090001		15.2	10CP1	1P160084		17.2	10CP1
16EK36	CROSS MIDDLE MARKER	3V	13	0	10CP1				10
16EK37	DESCEND THRU 1200 FT	3R	12	0	10CP1				10
	- DECISION HEIGHT				10				10
16EK38	CONTROL AIRCRAFT	8A	03	0	10CP4	4A	72	0	10CP3
	THRU TOUCHDOWN				10				10
16EK39	CROSS END OF RUNWAY				10				10
16EK40	TOUCHDOWN AND ROLL	4B	08	0	10CP2	4A	68	0	10CP2
	OUT	4C	01	2.5	10CP3	4C	02	24	10CP2
		4D	28	60	10CP3	4M	03	90	10CP1
		8A	07	0	10CP1				10
16EK41					10				10
16EK42					10				10
16EK43					10				10
16EK44					10				10
16EK45					10				10
16EK46					10				10
16EK47					10				10
16EK48					10				10
16EK49					10				10
					10				10
16EK50	ADVISE ATC OF PILOT	1R	30	0	10CP4	1R	40	0	10CP3
	INCAPACITATION	1P16EK01		0	10CP1	1P16EK02		3	10CP1
		1P16EK03		11	10CP1	1R	35	11	10CP2
		1P16EK04		11	10CP1	1P16EK05		14	10CP1
		1P16EK06		18	10CP1				10
16EK51	MONITOR AUTO HEADING	2K	14	0	10CP2	2K	33	0	10CP1
	CHANGE	2K	47	0	10CP1	2K	52	0	10CP1
16EK52	SET EADI FOR ILS	2J	31	0	10CP3	2J	25	2.15	10CP2
	APPROACH	2J	13	4.82	10CP1				10
16EK53	FLIGHT INSTRUMENT	2J	02	0	10CP2	3L	02	0	10CP1
	SCAN - B	3A	10	0	10CP1	2K	14	0	10CP2
		2K	46	0	10CP1				10
16EK54	CAPTURE ILS LOCALI-	2K	09	0	10CP1				10
	ZER				10				10
16EK55	CROSS STUBBS. AGCS				10				10
	BEGINS PROGRAMMED				10				10
	DECELERATION TO 135				10				10

	KIAS				10			10
16EK56	SET AGCS TO AUTO	2H	10	0	10CP2	2H	11	2.13 10CP1
	LAND MODE - A	2H	51	3.18	10CP1	2J	13	3.96 10CP1
16EK57	CROSS MIDDLE MARKER	3V	13	0	10CP1			10
16EK58	DESCEND THRU DECI- SION HEIGHT	2J	22	0	10CP1			10
16EK59	DISENGAGE AGCS - A	2H	10	0	10CP2	2H	13	2.13 10CP1
		2H	01	3.18	10CP3	2H	02	4.62 10CP1
		2H	09	5.67	10CP1	4A	64	0 10CP2
		4A	64	10	10CP3			10
16EK60	SET ADF-1 TO LAKE- SIDE -375KC	5D	17	0	10CP3	5D	22	3 10CP1
		5D	01	3.77	10CP2	5D	02	5.75 10CP3
		1P160065		7.73	10CP1			10
16EK61	SET ADF-2 TO LAKE- SIDE -375	5E	17	0	10CP2	5E	01	3 10CP2
		5E	02	3	10CP3	5E	20	3 10CP1
		1P160066		5	10CP1			10
16EK62	RECEIVE INSTRUCTIONS TO MAINTAIN CURRENT SPEED	1B	18	0	10CP4	1P160036		0 10CP1
		1B	14	8	10CP4	1B	20	8 10CP3
		1P160037		8	10CP1			10
16EK63	HANDOFF TO GROUND CONTROL -121.9	1B	18	0	10CP3	1P160087		0 10CP1
		1P160088		3.5	10CP1	1B	14	6 10CP2
		1B	15	6	10CP2	1P160089		6 10CP1
		1B	01	9	10CP3	1B	02	9 10CP2
		1B	03	11.88	10CP1	1B	05	14 10CP1
		1B	29	15.50	10CP2	1B	16	15.5 10CP1
		1P160090		15.5	10CP1	1B	18	20 10CP4
		1P160091		20	10CP1	1P160092		23.5 10CP1
		1B	29	25	10CP1	1B	15	25 10CP4
		1P160037		25	10CP1			10
16EK64	RECEIVE FINAL APPROACH INSTRUCTION	1B	37	0	10CP3	1P160028		0 10CP1
		1P160029		3.21	10CP1	1P160030		7.49 10CP1
		1P160031		11.77	10CP1	1B	26	15 10CP1
		1B	17	15	10CP1	1P160032		15 10CP1
		1P160033		19	10CP1			10
16EK65	CROSS RWY 08 OUTER MARKER	3V	11	0	10CP1	1P160075		2 10CP1
		1P	13	2	10CP4			10
16EK66	CONTACT TOWER FOR FINAL LANDING CLEAR- ANCE	1B	05	0	10CP4	1B	25	2.4 10CP1
		1B	17	2.4	10CP2	1P160038		6.4 10CP1
		1B	19	9	10CP2	1P160040		9 10CP1
		1P160041		13	10CP1	1B	29	16 10CP1
		1B	15	16	10CP4	1P160037		16 10CP1
16EK67	RECEIVE INSTRUCTIONS TO SLOW TO 160 KIAS.	1B	37	0	10CP2	1P160063		0 10CP1
		1B	14	4	10CP2	1B	15	4 10CP2
		1P160064		4	10CP1			10
16EK68	RECEIVE INSTRUCTIONS TO TURN TO HDG 180	1B	18	0	10CP4	1P160026		0 10CP1
		1B	26	4	10CP2	1B	32	4 10CP2
		1P160027		4	10CP1			10
16EK69	RECEIVE INSTRUCTIONS TO SLOW TO 150	1B	18	0	10CP4	1P160034		0 10CP1
		1B	14	4	10CP2	1B	15	4 10CP2
		1P160035		4	10CP1			10
16FB01	LANDING GEAR FAIL TO EXTEND	4D	03	00	10CP3	4D	07	3.27 10CP1
		4D	11	3.27	10CP1	4D	05	5.54 10CP1
		4D	09	5.54	10CP3			10
16FB02	CP REPORT GEAR MAL- FUNCTION	1P16FB01		00	10CP1	1P	13	00 10 P3
				10				10
16FB03	RECYCLE GEAR	4D	01	00	10CP1	4D	07	13.06 10CP2
		4D	11	13.06	10CP1	4D	08	13.60 10CP1
		4D	12	13.60	10CP1	4D	03	14.14 10CP2
		4D	05	21.67	10CP2	4D	11	21.67 10CP1
		1P16FB02		22.21	10CP1	1P	15	22.21 10 P4

16FB04	INITIATE GO-AROUND BY PILOT	1P16FB03	.41	10 P1 1P	15	.41	10CP4
		4B 06	.41	10 P1			10
16FB05	COPILLOT GOAROUND ACTIVITIES	3H 02	00	10CP1 7F	27	00	10CP2
		7F 29	00	10CP2 4E	11	00	10CP3
		3A 10	00	10CP1 7G	40	00	10CP1
		4E 15	1.40	10CP1			10
		1P16FB04	7.80	10CP1			10
		1P 10	7.80	10 P2 4D	01	9.80	10CP1
		4D 07	9.80	10CP1 4D	11	9.80	10CP1
		4B 07	12.86	10CP2 1P16FB05		15.15	10CP1
		1P 16	15.15	10 P2 4D	08	19.80	10CP1
		4D 12	19.80	10CP1 1P16FB06		19.80	10CP1
		1P 02	19.80	10 P2			10
16FB06	PILOT/GRD GOAROUND COMMUNICATIONS	1B 24	0	10 P4 1B	16	0	10 P1
		1P16FB07	0	10 P1 1B	20	3.5	10 *2
		1P16FB08	3.5	10 *1 1B	38	8.9	10 P1
		1B 39	8.9	10 P1 1P16FB09		8.9	10 P1
		1P16FB21	14.4	10 P1			10
16FB07	P/CP GOAROUND COMMUNICATIONS	1P16FB10	0	10 P1 1P	19	0	10CP3
				10			10
16FB08	CP FLAP SET AND CALLOUTS	4E 09	0	10CP3 4E	15	2.69	10CP3
		1P16FB11	4.92	10CP1 1P	07	5.00	10CP1
		4B 07	5.08	10CP1 7F	25	7.81	10CP2
		7F 30	7.81	10CP2 3H	06	9.89	10CP1
		1P16FB12	16.89	10CP1 1P	07	16.89	10 P1
16FB09	LEVEL OFF AT 3000			10			10
16FB10	CP RADIO COMMUNICATIONS	1B 24	0	10CP2 1B	16	0	10CP4
		1P16FB13	0	10CP1			10
16FB11	ATL TWR HANDOFF	1B 32	0	10 *4 1P16FB14		0	10 *1
		1P16FB15	7.5	10CP1 1P	06	7.5	10 P3
		3A 10	7.5	10 P1 4B	07	7.5	10 P2
		1B 25	9.5	10CP1 1B	17	9.5	10CP2
		1P16FB16	9.5	10CP1 4G	04	9.61	10 P1
		3H 02	9.61	10 P2 4G	13	10.38	10 P4
16FB12	TURN TO MISSED APPROACH HEADING			10			10
				10			10
16FB13	CP SELECT VHF-3	1B 05	0	10CP1			10
16FB14	TURN COMPLETE			10			10
16FB15	MANUAL GEAR EXTEND PROCEDURE	1P16FB17	0	10 P1 1P	02	0	10CP1
		8B 02	0	10CP3 8B	05	5.9	10CP2
		8B 03	10.9	10CP1 1P16FB18		12.9	10CP1
		1P 10	12.9	10 P1 8B	03	14.17	10CP1
		1P16FB19	16.17	10CP1 1P	12	16.17	10 P2
		4D 14	16.17	10CP1 4D	16	19.67	10CP1
		4D 11	20.37	10CP1 4D	17	21.17	10CP1
		4D 07	21.97	10CP1 4D	18	22.77	10CP1
		4D 11	23.57	10CP1 8B	03	25.57	10CP1
		4D 06	26.17	10CP1 4D	03	27.57	10CP1
		4D 09	27.57	10CP3 4D	08	30.84	10CP1
		4D 12	30.84	10CP1 1P16FB20		32.84	10CP1
		1P 10	32.84	10 P3 4D	15	34.04	10CP1
170001	RECEIVE INSTRUCTIONS TO SLOW TO 200 KIAS	1B 37	0	10 *2 1P170001		0	10 *1
		1B 26	4	10CP2 1B	32	4	10CP2
		1P170002	4	10CP1			10
170002	ADJUST THRUST	4B 07	0	10 P2			10
170003	REACH 210 KIAS			10			10
170004	REACH 200 KIAS			10			10
170005	CROSS NORCROSS VOR.	1B 37	0	10 *4 1P170003		0	10 *1
	RECEIVE INSTRUCTIONS TO TURN TO HDG 210.	1B 24	4	10CP2 1B	16	4	10CP4
		1P170004	4	10CP1			10

170006	TURN COMPLETED - ON			10		10
	HDG 210			10		10
170007	TUNE NAV RADIOS FOR	8B 06	0	10CP1 8B160003	6	10CP1
	MLS APPROACH.	5U 01	11	10CP3 5U 02	11	10CP3
		5U 03	14	10CP2 5V 01	44	10CP3
		5V 02	44	10CP2 5V 03	46.93	10CP1
		1P170026	49	10CP1 1P 02	49	10 P3
		5G 04	52	10 P1 5G 05	52	10 P1
		5H 02	49	10CP1 5H 03	49	10CP1
170008	RECEIVE INSTRUCTIONS	1B 19	0	10 *2 1P170005	0	10 *1
	TO TURN, REDUCE SPD,	1P170006	3.5	10 *1 1B 26	7	10CP4
	AND DESCEND.	1B 32	7	10CP4 1P170007	7	10CP1
		1P170008	11	10CP1		10
170009	BEGIN TURN TO HDG			10		10
	270			10		10
170010	TURN COMPLETED - ON	4B 07	0	10 P2		10
	HDG 270. BEGIN DE-			10		10
	CELERATION			10		10
170011	REACH 190 KIAS			10		10
170012	REACH 180 KIAS.			10		10
	BEGIN DESCENT TO			10		10
	6000 FT			10		10
170013	LEVEL OFF AT 6000 FT			10		10
170014	MLS ACQUISTION	3R 59	0	10CP1 1P160067	2.5	10CP1
		1P 02	2.5	10 P4		10
170015	RECEIVE INSTRUCTIONS	1B 18	0	10 *3 1P170009	0	10 *1
	TO TURN TO HDG 180,	1B 25	6	10CP2 1B 17	6	10CP3
	DESCEND TO 3600 FT.	1P170011	6	10CP1 1P170012	9.5	10CP1
170016	BEGIN TURN TO HDG			10		10
	180 AND DESCENT TO			10		10
	3600 FT.			10		10
170017	TURN COMPLETED - ON			10		10
	HDG 180			10		10
170018	LEVEL OFF AT 3600 FT			10		10
170019	RECEIVE INSTRUCTIONS	1B 18	0	10 *4 1P170013	0	10 *1
	TO REDUCE SPEED TO	1B 26	4	10CP2 1B 32	4	10CP2
	160 KIAS	1P170014	4	10CP1		10
170020	REACH 170 KIAS			10		10
170021	RECEIVE FINAL CLEAR-	1B 19	0	10 *4 1P170015	0	10 *1
	ANCE	1P170016	3	10 *1 1P170017	7	10 *1
		1B 25	10	10CP1 1B 17	10	10CP2
		1P170018	10	10CP1 1P170019	14	10CP1
		1B 07	15	10CP3 1B 08	15	10CP2
		1B 09	17.88	10CP1		10
170022	BEGIN RUNWAY 08	3R 16	0	10 P2 3S 01	0	10 P2
	CENTERLINE ACQUISTI-	4A 28	0	10 P2 3S 11	5	10 P2
	TION TURN	3R 16	10	10 P3 3S 01	10	10 P2
		4A 28	10	10 P2 3R 16	20	10 P2
		3S 01	20	10 P2 4A 28	20	10 P2
		3R 16	30	10 P3 3S 01	30	10 P2
		4A 28	30	10 P2 3R 16	40	10 P3
		3S 01	40	10 P2 4A 28	40	10 P2
170023	RECEIVE INSTRUCTIONS	1B 32	0	10 *1 1P170020	0	10 *1
	TO MAINTAIN SPEED	1P170021	3.5	10 *1 1B 14	4.5	10CP4
		1B 15	4.5	10CP4 1P160037	4.5	10CP1
170024	TURN COMPLETED -			10		10
170025	CROSS APPROACH GATE.	4B 07	0	10 P2		10
	BEGIN DECELERATION.			10		10
170026	CONTACT TOWER	1B 06	0	10CP4 1B 28	2.39	10CP1
		1B 17	2.39	10CP2 1P170022	2.39	10CP1

		1P170023	6.39	10CP1	1B	19	8	10	*2
		1P170024	8	10	*1	1P170025	11.50	10	*1
170027	BEGIN 6 DEG FIRST			10				10	
	SEGMENT MLS APPROCH			10				10	
	DESCENT			10				10	
170028	REACH 135 KIAS			10				10	
170029	BEGIN TRANSITION TO			10				10	
	3 DEG SECOND SEGMENT			10				10	
	MLS APPROCH DESCENT			10				10	
170030	COMPLETE TRANSITION			10				10	
170031	CONTROL AIRCRAFT ON	4A 69	0	10	P1	2J 02	0	10	P4
	FINAL APP -180	3L 04	0	10	P3	3A 14	0	10	P2
		2J 05	0	10	P4	2J 19	0	10	P4
		2K 14	0	10	P4	2K 46	0	10	P3
		2K 33	0	10	P3	2J 01	0	10	P4
170032	CONTROL AIRCRAFT ON	4A 69	0	10	P3	2J 02	0	10	P3
	FINAL APP -30	3L 02	0	10	P3	3A 10	0	10	P3
		2J 05	0	10	P3	2J 19	0	10	P3
		2K 14	0	10	P3	2K 46	0	10	P2
		2K 33	0	10	P2	2J 01	0	10	P3
170033	CONTROL AIRCRAFT ON	4A 30	0	10	P2	2J 02	0	10	P2
	FINAL APP -10	3L 02	0	10	P1	3A 10	0	10	P1
		2J 05	0	10	P2	2J 19	0	10	P2
		2K 14	0	10	P2	2K 46	0	10	P1
		2K 33	0	10	P1	2J 01	0	10	P2
170034	CONTROL AIRCRAFT ON	4A 69	0	10	P4	2J 02	0	10	P3
	FINAL APP -60	3L 02	0	10	P4	3A 10	0	10	P4
		2J 04	0	10	P4	2J 19	0	10	P3
		2K 15	0	10	P2	2K 46	0	10	P4
		2K 33	0	10	P4	2J 01	0	10	P3
17EK00	PILOT INCAPACITATED			10				10	
17EK01	ADVISE APPROACH CON-	1B 26	0	10CP3	1B	32	0	10CP3	
	TROL OF PILOT INCA-	1P16EK01	0	10CP1	1P16EK07		3	10CP1	
	PACITATION	1P16EK03	7	10CP1	1B	19	12	10CP4	
		1P16EK04	12	10CP1	1P16EK08		15	10CP1	
		1P16EK06	19	10CP1				10	
17EK02	MLS ACQUISITION			10				10	
17EK03	BEGIN TURN TO HDG			10				10	
	180 AND DESCENT TO			10				10	
	3600 FT			10				10	
17EK04	TURN COMPLETED - ON			10				10	
	HDG 180			10				10	
17EK05	LEVEL OFF AT 3600 FT			10				10	
17EK06	REACH 170 KIAS			10				10	
17EK07	BEGIN RUNWAY CENTER-	3R 16	0	10CP3	3S	04	0	10CP3	
	LINE ACQUISITION	4A 28	0	10CP2	3S	11	5	10CP3	
	TURN	3R 16	10	10CP3	3S	04	10	10CP3	
		4A 74	10	10CP2	3R	16	20	10CP3	
		3S 04	20	10CP3	4A	74	20	10CP2	
		3R 16	30	10CP3	3S	04	30	10CP3	
		4A 74	30	10CP2	3R	16	40	10CP3	
		3S 04	40	10CP3	4A	74	40	10CP2	
17EK08	TURN COMPLETED			10				10	
17EK09	CONTROL AIRCRAFT ON	3R 61	0	10CP1	3S	17	0	10CP3	
	FINAL APPROACH - X	4A 69	0	10CP2				10	
17EK10	CROSS APPROACH GATE.	4B 07	0	10CP1				10	
	BEGIN DECELERATION.			10				10	
17EK11	BEGIN 6 DEG FIRST			10				10	
	SEGMENT MLS APPROACH			10				10	
	DESCENT			10				10	

17EK12	REACH 135 KIAS			10		10
17EK13	BEGIN TRANSITION TO			10		10
	3 DEG SECOND SEGMENT			10		10
	MLS APPROACH DESCENT			10		10
17EK14	COMPLETE TRANSITION			10		10
17EK15	500 FT ABOVE RUNWAY			10		10
17EK16	CROSS END OF RUNWAY			10		10
17EK17	TOUCHDOWN			10		10
17EK18	RECEIVE INSTRUCTIONS	1B 18	0	10CP3 1P170009	0	10CP1
	TO TURN TO HDG 180,	1B 25	6	10CP2 1B 17	6	10CP3
	DESCEND TO 3600 FT.	1P170011	6	10CP1 1P170012	9.5	10CP1
17EK19	RECEIVE INSTRUCTIONS	1B 18	0	10CP1 1P170013	0	10CP1
	TO REDUCE SPEED TO	1B 26	4	10CP2 1B 32	4	10CP2
	160 KIAS	1P170014	4	10CP1		10
17EK20	RECEIVE FINAL CLEAR-	1B 19	0	10CP4 1P170015	0	10CP1
	ANCE	1P170016	3	10CP1 1P170017	7	10CP1
		1B 25	10	10CP1 1B 17	10	10CP2
		1P170018	10	10CP1 1P170019	14	10CP1
		1B 07	15	10CP3 1B 08	15	10CP2
		1B 09	17.88	10CP1		10
17EK21	RECEIVE INSTRUCTIONS	1B 32	0	10CP1 1P170020	0	10CP1
	TO MAINTAIN SPEED	1P170021	3.5	10CP1 1B 14	4.5	10CP4
		1B 15	4.5	10CP4 1P160037	4.5	10CP1
17EK22	CONTACT TOWER	1B 06	0	10CP4 1B 28	2.39	10CP1
		1B 17	2.39	10CP2 1P170022	2.39	10CP1
		1P170023	6.39	10CP1 1B 19	8	10CP2
		1P170024	8	10CP1 1P170025	11.50	10CP1
180001	TUNE ATLANTA	1R 07	0	10CP3 1R 08	0	10CP4
	APPROACH CONTROL	1R 09	2.9	10CP2		10
	-126.9			10		10
180002	TUNE ATIS -123.7	1Q 07	0	10CP4 1Q 08	0	10CP4
		1Q 09	2.97	10CP2 1Q 06	4.94	10CP2
		1Q 12	6.39	10CP2 1Q 30	9	10 *3
		1P160001	9	10 *1 1P160002	12.42	10 *1
		1P160003	16.98	10 *1 1P160004	21.54	10 *1
		1P160005	26.1	10 *1 1P 06	31	10 *1
180003				10		10
180004	SET NAV-3 TO ATLANTA	5Y 01	0	10CP3 5Y 02	0	10CP2
	VOR -115.6	5Y 03	3.12	10CP2 5Y 05	4.7	10CP1
180005	CROSS WPT STAR01.			10		10
	AGCS BEGINS PROGRAM-			10		10
	MED TURN TO HDG 220			10		10
	AND DECELERATION TO			10		10
	200 KIAS			10		10
180006	TURN COMPLETED - ON			10		10
	HDG 220			10		10
180007	REACH 210 KIAS			10		10
180008	REACH 200 KIAS			10		10
180009	HANDOFF TO APPROACH	1R 16	0	10 *4 1P160016	0	10 *1
	CONTROL -127.25	1P160017	4	10 *1 1R 25	5	10CP3
		1R 37	5	10CP4 1P160018	5	10CP1
		1R 01	8	10CP3 1R 02	8	10CP2
		1R 03	10.93	10CP2 1R 05	12.51	10CP1
		1R 28	14	10CP1 1R 40	14	10CP2
		1P160019	14	10CP1 1P160020	17.5	10CP1
		1R 16	18.5	10 *2 1P160021	18.5	10 *1
		1N 07	22	10CP1		10
180010	CROSS WPT STAR02.			10		10
	AGCS BEGINS PROGRAM-			10		10
	MED TURN TO HDG 270			10		10

	AND DECELERATION TO				10			10
	170 KIAS				10			10
180011	TURN COMPLETED -ON				10			10
	HDG 270.				10			10
180012	REACH 170 KIAS. AGCS				10			10
	BEGINS PROGRAMMED				10			10
	DESCENT TO 4500 FT.				10			10
180013	SET NAV-1 TO RWY 08	5W	01	0	10CP3	5W	02	0 10CP2
	ILS -109.9	5W	03	2.37	10CP2			10
180014	SET NAV-2 TO RWY 08	5X	01	0	10CP3	5X	02	0 10CP2
	ILS -109.9	5X	03	2.95	10CP2			10
180015	SET NAV-3 TO RWY 08	5Y	01	0	10CP3	5Y	02	0 10CP2
	ILS -109.9	5Y	03	3.12	10CP2			10
180016	DESCEND THRU 10000	7G	17	0	10CP2			10
	FT				10			10
180017	LEVEL OFF AT 4500 FT				10			10
180018	SET DECISION HEIGHT	2J	20	0	10CP1	2J	21	00 10CP2
	ON EADI				10			10
180019	AGCS BEGINS PROGRAM-				10			10
	MED DECELERATION TO				10			10
	160 KIAS				10			10
180020	REACH 160 KIAS				10			10
180021	AGCS BEGINS PROGRAM-				10			10
	MED TURN TO HDG 180				10			10
180022	TURN COMPLETED - ON				10			10
	HDG 180.				10			10
180023	RECEIVE INSTRUCTIONS	1R	16	0	10 *1	1P180004		0 10 *1
	FROM ATC	1P180005		4	10 *1	1R	24	6 10CP4
		1R	15	6	10CP4	1P180006		6 10CP1
		1R	07	10	10CP3	1R	08	10 10CP4
		1R	09	12.9	10CP2			10
180024	AGCS BEGINS PROGRAM-				10			10
	MED TURN TO HDG 120				10			10
180025	TURN COMPLETED - ON				10			10
	HDG 120				10			10
180026	AGCS BEGINS PROGRAM-				10			10
	MED TURN TO HDG 090				10			10
180027	CAPTURE LOCALIZER	2J	09	0	10CP1	1P160067		2 10CP1
		1P	02	2	10 P4			10
180028	TURN COMPLETED - ON				10			10
	HDG 090 - FINAL APP				10			10
180029	AGCS BEGINS PROGRAM-				10			10
	MED DECELERATION TO				10			10
	150 KIAS				10			10
180030	REACH 150 KIAS				10			10
180031	ACQUIRE GLIDE SLOPE	3V	09	0	10 P2			10
180032	CROSS STUBBS. AGCS	1P160072		0	10CP1	1P	10	0 10 P1
	BEGINS PROGRAMMED				10			10
	DECELERATION TO 135				10			10
	KIAS				10			10
180033	SET AGCS TO AUTO	2H	10	0	10 P1	2H	11	2.13 10 P1
	LAND MODE	2H	51	3.18	10 P1	2J	13	3.96 10 P1
180034	CONTACT TOWER FOR	1R	06	0	10CP3	1R	26	2 10CP2
	FINAL LANDING CLEAR-	1R	38	2	10CP3	1P160038		2 10CP1
	ANCE.	1P160039		6	10CP1	1R	32	8 10 *4
		1P160040		8	10 *1	1P160041		12 10 *1
		1R	27	15	10CP2	1R	36	15 10CP4
		1P160037		15	10CP1			10
180035	CROSS END OF RUNWAY				10			10
180036	TOUCHDOWN AND ROLL-	8A	11	00	10CP2	2J	15	00 10CP2

	OUT, AGCS AUTO LAND	2J	40	00	10CP2	2J	41	00	10CP2
	MODE CONTROLS A/C	7F	25	00	10CP3	7F	30	00	10CP4
	UNTILL 30KTS				10				10
180037	DISENGAGE AGCS	2H	10	0	10CP1	2H	13	2.13	10CP1
		2H	01	3.18	10CP2	2H	02	4.62	10CP1
		2H	09	5.67	10CP1	4A	64	0	10CP2
		4A	64	10	10CP3				10
180038	HANDOFF TO GROUND	1R	32	0	10 *2	1P160087		0	10 *1
	CONTROL -121.9	1P160088		3.5	10 *1	1R	23	6	10CP3
		1R	36	6	10CP2	1P160089		6	10CP1
		1R	01	9	10CP3	1R	02	9	10CP2
		1R	03	11.93	10CP2	1R	05	13.51	10CP2
		1R	14	15	10CP4	1R	15	15	10CP3
		1P160090		15	10CP1	1R	34	19	10 *4
		1P160091		19	10 *1	1P160092		22.50	10 *1
		1R	27	24	10CP2	1R	36	24	10CP4
		1P160037		24	10CP1				10
180039	SET EADI FOR ILS	2J	32	0	10 P1	2J	35	2.15	10 P1
	APPROACH	2J	31	4.41	10 P1	2J	33	5.76	10 P2
		2J	18	7.11	10 P1				10
180040	SET EADI FOR STATUS	2J	32	0	10 P1	2J	35	2.15	10 P1
	APPROACH	2J	29	4.41	10 P1	2J	33	5.76	10 P2
		2J	18	7.11	10 P1				10
180041	FLIGHT INSTRUMENT	2K	14	0	10 P2	2K	46	0	10 P1
	SCAN -A1, PILOT	2K	33	0	10 P1	2J	13	0	10 P2
		2J	14	0	10 P2	2J	01	0	10 P2
		2J	19	0	10 P2	3A	10	0	10 P1
180042	FLIGHT INSTRUMENT	2K	14	0	10 P3	2K	46	0	10 P2
	SCAN -A2, PILOT	2K	33	0	10 P2	2J	13	0	10 P3
		2J	14	0	10 P3	2J	01	0	10 P3
		2J	19	0	10 P3	3A	10	0	10 P3
180043	FLIGHT INSTRUMENT	2J	15	0	10 P2	2J	13	0	10 P3
	SCAN - FINAL APP	2J	14	0	10 P3	2J	01	0	10 P3
		2J	38	0	10 P3	2J	39	0	10 P3
		2J	19	0	10 P3	3A	10	0	10 P3
		7F	33	0	10 P3	7F	34	0	10 P3
180044	FLIGHT INSTRUMENT	2K	14	0	10CP2	2K	46	0	10CP1
	SCAN -A1, COPILOT	2K	33	0	10CP1	2J	13	0	10CP2
		2J	14	0	10CP2	2J	01	0	10CP2
		2J	19	0	10CP2	3A	10	0	10CP1
180045	FLIGHT INSTRUMENT	2K	14	0	10CP3	2K	46	0	10CP2
	SCAN -A2, COPILOT	2K	33	0	10CP2	2J	13	0	10CP3
		2J	14	0	10CP3	2J	01	0	10CP3
		2J	19	0	10CP3	3A	10	0	10CP3
180046	FLIGHT INSTRUMENT	2K	14	0	10 P4	2K	46	0	10 P3
	SCAN -A1, PILOT	2K	33	0	10 P3	2J	13	0	10 P4
		2J	14	0	10 P4	2J	01	0	10 P4
		2J	19	0	10 P4	3A	14	0	10 P2
180047	FLIGHT INSTRUMENT	2K	14	0	10CP4	2K	46	0	10CP3
	SCAN -A1, COPILOT	2K	33	0	10CP3	2J	13	0	10CP4
		2J	14	0	10CP4	2J	01	0	10CP4
		2J	19	0	10CP4	3A	14	0	10CP2
180050	REACH 190 KIAS				10				10
180051	REACH 180 KIAS. AGCS				10				10
	BEGINS PROGRAMMED				10				10
	DESCENT TO 6000 FT				10				10
180052	DESCEND THRU 10000	7G	17	0	10CP2				10
	FT				10				10
180053	LEVEL OFF AT 6000 FT				10				10
180054	SET NAV-1 TO RWY 08	5W	01	0	10CP3	5W	02	0	10CP2

180055	MLS	5W	03	2.37	10CP2			10
	SET NAV-2 TO RWY 08	5X	01	0	10CP3	5X	02	0 10CP2
180056	MLS	5X	03	2.95	10CP2			10
	SET NAV-3 TO RWY 08	5Y	01	0	10CP3	5Y	02	0 10CP2
180057	MLS	5Y	03	3.12	10CP2			10
	CROSS WPT STAR03.							10
	AGCS BEGINS PROGRAM-							10
	MED TURN TO HDG 180							10
	AND DESCENT TO 3600							10
	FT							10
180058	TURN COMPLETED - ON							10
	HDG 180							10
180059	LEVEL OFF AT 3600FT							10
	AGCS BEGINS PROGRAM-							10
	MED DECELERATION TO							10
	160 KIAS							10
180060	REACH 170 KIAS							10
180061	REACH 160 KIAS							10
180062	AGCS BEGINS PROGRAM-							10
	MED TURN TO HDG 090.							10
180063	TURN COMPLETED - ON							10
	HDG 090. CROSS WPT							10
	STAR04 -LAKESIDE							10
	AGCS BEGINS PROGRAM-							10
	MED DECELERATION TO							10
	135 KIAS.							10
180064	HANDOFF TO ATLANTA	1R	34	0	10 *4	1P180001		0 10 *1
	TOWER -119.5	1P180002		4	10 *1	1R 37		5 10CP4
		1R 25		5	10CP3	1P180003		5 10CP1
					10	1R 07		15 10CP3
		1R 08		15	10CP4	1R 09		17.9 10CP2
		1R 06		19.48	10CP2	1R 28		21 10CP2
		1R 38		21	10CP3	1P160038		21 10CP1
		1P160039		25	10CP1	1R 32		25 10 *4
		1P160040		25	10 *1	1P160041		30 10 *1
180065	BEGIN 6 DEG FIRST							10
	SEGMENT MLS APPROACH							10
	DESCENT.							10
180066	REACH 135 KIAS							10
180067	TRANSITION TO 3 DEG							10
	SECOND SEGMENT MLS							10
	APPROACH DESCENT							10
180068	TRANSITION COMPLETE.							10
	REACH 130 KIAS.							10
180069	CROSS END OF RWY 08							10
	-WPT STAR05							10
180070	FLIGHT INSTRUMENT	2K	14	0	10 P2	2K 46		0 10 P1
	SCAN -A1, PILOT	2K	33	0	10 P1	2J 05		0 10 P2
		2J 04		0	10 P2	2J 01		0 10 P2
		2J 19		0	10 P2	3A 10		0 10 P1
180071	FLIGHT INSTRUMENT	2K	14	0	10 P3			
	SCAN -A2, PILOT	2K	33	0	10 P2	2J 13		0 10 P3
		2J 04		0	10 P3	2J 01		0 10 P3
		2J 19		0	10 P3	3A 10		0 10 P3
180072	FLIGHT INSTRUMENT	2J	15	0	10 P2	2J 05		0 10 P3
	SCAN - FINAL APP	2J	04	0	10 P3	2J 01		0 10 P3
		2J 38		0	10 P3	2J 39		0 10 P3
		2J 19		0	10 P3	3A 10		0 10 P3
180073	FLIGHT INSTRUMENT	2K	14	0	10CP2	2K 46		0 10CP1
	SCAN -A1, COPILOT	2K	33	0	10CP1	2J 05		0 10CP2

	2J	04	0	10CP2	2J	01	0	10CP2
	2J	19	0	10CP2	3A	10	0	10CP1
180074 FLIGHT INSTRUMENT	2K	14	0	10CP3	2K	46	0	10CP2
SCAN -A2, COPILOT	2K	33	0	10CP2	2J	05	0	10CP3
	2J	04	0	10CP3	2J	01	0	10CP3
	2J	19	0	10CP3	3A	10	0	10CP3
180075 FLIGHT INSTRUMENT	2K	14	0	10 P4	2K	46	0	10 P3
SCAN -A1, PILOT	2K	33	0	10 P3	2J	05	0	10 P4
	2J	04	0	10 P4	2J	01	0	10 P4
	2J	19	0	10 P4	3A	14	0	10 P2
180076 FLIGHT INSTRUMENT	2K	14	0	10CP4	2K	46	0	10CP3
SCAN -A1, COPILOT	2K	33	0	10CP3	2J	05	0	10CP4
	2J	04	0	10CP4	2J	01	0	10CP4
	2J	19	0	10CP4	3A	14	0	10CP2
18EK00 PILOT INCAPACITATED				10				10
18EK01 RECEIVE INSTRUCTIONS	1R	16	0	10CP1	1P180004		0	10CP1
FROM ATC	1P180005		4	10CP1	1R	24	6	10CP4
	1R	15	6	10CP4	1P180006		6	10CP1
	1R	07	10	10CP3	1R	08	10	10CP4
	1R	09	12.9	10CP2				10
18EK02 CONTACT TOWER FOR	1R	06	0	10CP3	1R	26	2	10CP2
FINAL LANDING CLEAR-	1R	38	2	10CP3	1P160038		2	10CP1
ANCE.	1P160039		6	10CP1	1R	32	8	10CP4
	1P160040		8	10CP1	1P160041		12	10CP1
	1R	27	15	10CP2	1R	36	15	10CP4
	1P160037		15	10CP1				10
18EK03 HANDOFF TO GROUND	1R	32	0	10CP2	1P160087		0	10CP1
CONTROL -121.9	1P160088		3.5	10CP1	1R	23	6	10CP3
	1R	36	6	10CP2	1P160089		6	10CP1
	1R	01	9	10CP3	1R	02	9	10CP2
	1R	03	11.93	10CP2	1R	05	13.51	10CP2
	1R	14	15	10CP4	1R	15	15	10CP3
	1P160090		15	10CP1	1R	34	19	10CP4
	1P160091		19	10CP1	1P160092		22.50	10CP1
	1R	27	24	10CP2	1R	36	24	10CP4
	1P160037		24	10CP1				10
18EK04 HANDOFF TO ATLANTA	1R	34	0	10CP4	1P180001		0	10CP1
TOWER -119.5	1P180002		4	10CP1	1R	37	5	10CP4
	1R	25	5	10CP3	1P180003		5	10CP1
				10	1R	07	15	10CP3
	1R	08	15	10CP4	1R	09	17.9	10CP2
	1R	06	19.48	10CP2	1R	28	21	10CP2
	1R	38	21	10CP3	1P160038		21	10CP1
	1P160039		25	10CP1	1R	32	25	10CP4
	1P160040		25	10CP1	1P160041		30	10CP1
18EK05 FLIGHT INSTRUMENT	2J	15	0	10CP2	2J	05	0	10CP3
SCAN - FINAL APP	2J	04	0	10CP3	2J	01	0	10CP3
	2J	38	0	10CP3	2J	39	0	10CP3
	2J	19	0	10CP3	3A	10	0	10CP3
	7F	33	0	10CP3	7F	34	0	10CP3
200001 SHUTDOWN PROCEDURE-1	4B	08	0	10 P1	4D	27	2.5	10 P1
	4D	29	5	10 P3	7L	01	5.25	10 P1
	7L	02	7.34	10 P1	7B	25	9.43	10 P1
	7M	08	10.06	10 P3	7M	10	13.30	10 P2
	7F	31	15.81	10 P1	7F	32	17.83	10 P2
	7F	33	17.83	10 P2	7F	34	18.27	10 P2
	7G	06	18.71	10 P1	7C	25	20.40	10 P1
	7C	27	21.87	10 P1	7C	31	23.32	10 P1
	7C	35	25.29	10 P1	7C	39	26.75	10 P1
	7C	43	28.20	10 P2				10

200002 SHUTDOWN PROCEDURE-2	7B	71	0	10	P2	7G	34	1.0	10	P1
	7K	08	2.9	10	P1	7K	12	7.12	10	P1
	7J	25	8.26	10	P3	7J	27	9.68	10	P1
	7J	29	12.43	10	P1	7J	31	13.56	10	P1
	7J	33	14.69	10	P1	7J	35	15.82	10	P1
	7J	03	16.96	10	P3	7J	09	18.75	10	P4
	7J	11	20.25	10	P4				10	
200003 SHUTDOWN PROCEDURE-3	7A	06	0	10	P3	7A	08	1.46	10	P3
	7A	11	2.92	10	P1	7A	13	3.47	10	P1
	7D	03	4.02	10	P2	7D	32	6.72	10	P3
	7D	20	8.25	10	P2	7D	21	10.25	10	P1
	7D	15	11.25	10	P2	7D	17	12.78	10	P2
	7D	27	14.31	10	P2	7G	26	15.84	10	P1
	4D	41	18.28	10	P2	1F	07	20.90	10	P1
	1F	06	23.34	10	P3	1H	01	25.33	10	P1
	1F	09	27.70	10	P3	1P200040		29.20	10	P1
	1B	29	32.20	10	P4	1F	11	33.50	10	P3
	1P200041		33.50	10	P1	1F	09	38	10	*1
	1P200042		38	10	*1	4D	51	39	10	P1
	7Q	01	41	10	P1	7H	14	43.66	10	P1
	7H	11	45.06	10	P1	1P200005		47	10	P1
	1P	10	47	10	CP3				10	
200005 SHUTDOWN CHECKLIST-1	8B	02	0	10	CP1	8B	03	4	10	CP1
	1P200006		6	10	CP1	1P	10	6	10	P2
	7C	71	6.7	10	P1	1P200007		8.3	10	P1
	1P	07	8.3	10	CP4	8B	03	9.1	10	CP1
	1P200008		11.1	10	CP1	1P	11	11.1	10	P3
	7B	94	12	10	P1	1P200009		13.44	10	P1
	1P	06	13.44	10	CP4	8B	03	14	10	CP1
	1P200010		16	10	CP1	1P	10	16	10	CP1
	1P200011		17	10	P1	1P	07	17	10	CP2
200006 SHUTDOWN CHECKLIST-2	8B	03	0	10	CP1	1P200012		2	10	CP1
	1P	12	2	10	P4	7G	49	3.1	10	P1
	1P200009		4.38	10	P1	1P	06	4.38	10	CP4
	8B	03	5	10	CP1	1P200013		7	10	CP1
	1P	10	7	10	P3	7G	50	8.2	10	P1
	1P200009		9.5	10	P1	1P	06	9.5	10	CP4
	8B	03	10	10	CP1	1P200014		12	10	CP1
	1P	10	12	10	P1	7K	12	13	10	P1
	1P200009		14.2	10	P1	1P	06	14.2	10	CP4
200007 SHUTDOWN CHECKLIST-3	8B	03	0	10	CP1	1P200015		2	10	CP1
	1P	10	2	10	P1	7J	47	3	10	P1
	7J	48	4.47	10	P1	1P200009		5.22	10	P1
	1P	06	5.22	10	CP4	8B	03	5.72	10	CP1
	1P200016		7.72	10	CP1	1P	10	7.72	10	P3
	7J	49	8.92	10	P1	7J	50	10.34	10	P1
	1P200009		11.10	10	P1	1P	06	11.1	10	CP4
	8B	03	11.6	10	CP1	1P200017		13.6	10	CP1
	1P	02	13.6	10	P1	7A	11	15.1	10	P1
	7A	13	15.65	10	P1	1P200009		16.2	10	P1
	1P	06	16.2	10	CP4	8B	03	17	10	CP1
	1P200018		19	10	CP1	1P	14	19	10	P4
	7D	67	21.1	10	P1	7D	68	22.48	10	P1
	7D	64	23.22	10	P1	7D	65	24.53	10	P1
	7D	66	25.3	10	P1	7E	36	26.07	10	P1
	1P200019		26.6	10	P1	1P	16	26.6	10	CP3
200008 SHUTDOWN CHECKLIST-4	8B	03	0	10	CP1	1P200020		2	10	CP1
	1R	10	2	10	P3	1P200009		3.2	10	P1
	1P	06	3.2	10	CP3	8B	03	3.7	10	CP1
	1P200021		5.7	10	CP1	1P	10	5.7	10	P3

	7M	12	6.9	10 P2	7M	13	8.4	10 P2
	1P200009		9.2	10 P1	1P	06	9.2	10CP4
	8B	03	9.7	10CP1	1P200022		11.7	10CP1
	1P	10	11.7	10 P1	4D	49	12.7	10 P1
	1P200009		13.8	10 P1	1P	06	13.8	10CP4
	8B	03	14.3	10CP1	1P200023		16.3	10CP1
	1P	12	16.3	10 P2	6A	17	17.7	10 P1
	1N	18	19.87	10 P1	1P200009		20.93	10 P1
	1P	06	20.93	10CP4			10	
200009 SHUTDOWN CHECKLIST-5	8B	03	0	10CP1	1P200024		2	10CP1
	1P	10	2	10 P1	4F	12	3	10 P1
	1P200030		5	10 P1	1P	08	5	10CP3
	8B	03	6.2	10CP1	1P200025		8.2	10CP1
	1P	11	8.2	10 P2	1P200029		9	10 P1
	1P	08	9	10CP4	8B	03	9.6	10CP1
	1P200026		11.6	10CP1	1P	10	11.6	10 P1
	1P200031		12.6	10 P1	1P	06	12.6	10CP3
	8B	03	13.6	10CP1	1P200027		15.6	10CP1
	1R	10	15.6	10 P1	1P200032		16.6	10 P1
	1P	08	16.6	10CP1	8B	03	17.5	10CP1
	1P200033		19.5	10CP1	1P	02	19.5	10 P1
	7H	01	21	10 P1	7H	02	23.81	10 P1
	1P200034		26	10 P1	1P	06	26	10CP1
	8B	03	28.5	10CP1	1P200035		30.5	10CP1
	1P	12	30.5	10 P1			10	
200010 SECURING PROCEDURE	7D	06	0	10 P3	7L	11	2.65	10 P4
	8B200001		5	10 P1	7B	55	35	10 P2
	1P200039		38.3	10 P1	1P	10	38.3	10CP3
200011 SHUTDOWN CHECKLIST-6	8B	03	0	10CP1	1P200036		2	10CP1
	1P	10	2	10 P1	1P200009		3	10 P1
	1P	06	3	10CP4	8B	03	3.5	10CP1
	1P200037		5.5	10CP1	1P	10	5.5	10 P1
	1P200009		6.5	10 P1	1P	06	6.5	10CP4
	8B	03	7	10CP1	1P200038		9	10CP1
	1P	16	9	10 P4			10	
200012 SCENARIO COMPLETED			10				10	
20EK01 SHUTDOWN PROCEDURE - 1A	4B	08	0	10CP2	4D	27	2.5	10CP3
	4D	29	6	10CP4	7L	01	6.54	10CP1
	7L	02	8.63	10CP1	7B	25	10.72	10CP1
	7M	08	11.35	10CP4	7M	10	14.59	10CP3
	7F	31	17.1	10CP1	7F	32	19.12	10CP2
	7F	33	19.56	10CP2	7F	34	20	10CP2
	7G	06	20.44	10CP2	7C	25	22.15	10CP3
	7C	27	24.5	10CP3	7C	31	25.95	10CP4
	7C	35	27.54	10CP3	7C	39	28.93	10CP2
	7C	43	30.38	10CP2			10	
20EK02 SHUTDOWN PROCEDURE- 2A	7B	71	0	10CP3	7G	34	1.8	10CP3
	7K	08	3.7	10CP1	7K	12	7.92	10CP1
	7J	25	9.06	10CP2	7J	27	10.48	10CP2
	7J	29	11.90	10CP1	7J	31	13.03	10CP1
	7J	33	14.16	10CP1	7J	35	15.29	10CP1
	7J	37	16.43	10CP1	7J	39	17.57	10CP1
	7J	03	18.71	10CP1	7J	09	20.50	10CP1
	7J	11	22	10CP1			10	
20EK03 SHUTDOWN PROCEDURE - 3A	7D	03	0	10CP1	7D	32	2.7	10CP1
	7D	20	4.47	10CP1	7D	21	7.07	10CP1
	7D	15	8.07	10CP1	7D	17	10.47	10CP1
	7D	27	12.87	10CP1	7G	26	15.47	10CP2
	1F	07	17.91	10CP3	1F	06	20.25	10CP1
	1H	01	23.11	10CP2	1F	09	27	10CP3

	1P200040	27	10CP1	1B	29	29	10CP4
	1F 11	29	10CP3	1P200041	29	29	10CP1
	1F 09	32	10CP1	1P200042	32	32	10CP1
	4D 51	33	10CP2	7Q	01	36	10CP3
	7H 14	39	10CP1	7H	11	42	10CP1
20EK05 PERFORM SHUTDOWN	8B 02	0	10CP1	8B	03	4	10CP1
CHECKLIST - 1A	7C 71	6	10CP1	8B	03	7.59	10CP1
	7B 94	9.59	10CP1	8B	03	11	10CP1
	8B 03	13	10CP1	7G	49	15	10CP1
	8B 03	16.28	10CP1	7G	50	18.28	10CP1
	8B 03	19.56	10CP1	7K	12	21.56	10CP1
	8B 03	22.7	10CP1	7J	47	24.7	10CP1
	7J 48	26.17	10CP1	8B	03	26.92	10CP1
	7J 49	28.92	10CP1	7J	50	30.35	10CP1
20EK06 PERFORM SHUTDOWN	8B 03	0	10CP1	7A	11	2	10CP1
CHECKLIST - 2A	7A 13	2.55	10CP1	8B	03	3.1	10CP1
	7D 67	5.1	10CP1	7D	68	6.45	10CP1
	7D 64	7.22	10CP1	7D	65	8.53	10CP1
	7D 66	9.3	10CP1	7D	36	10.07	10CP1
	8B 03	10.61	10CP1	8B	03	12.61	10CP1
	7M 12	14.61	10CP2	7M	13	16.11	10CP2
	8B 03	16.89	10CP1	4D	49	18.89	10CP1
20EK07 PERFORM SHUTDOWN	8B 03	0	10CP1	6A	17	2	10CP1
CHECKLIST - 3A	1N 18	4.17	10CP1	8B	03	5.67	10CP1
	4F 12	7.67	10CP1	8B	03	9.67	10CP1
	8B 03	11.67	10CP1	8B	03	13.67	10CP1
	7H 01	15.67	10CP1	7H	02	18.48	10CP1
	8B 03	20.51	10CP1			10	
20EK08 SECURING PROCEDURE-A	7D 06	0	10CP2	7L	11	2.49	10CP1
	8B200001	6.08	10CP1	7B	55	37	10CP3
20EK09 PERFORM SHUTDOWN	8B 03	0	10CP1	8B	03	2	10CP1
CHECKLIST - 4A	8B 03	4	10CP1			10	
20EK10 SCENARIO COMPLETED		10				10	
230001 TURN OFF OF RWY 08	4M 05	0	10 P1	8A	08	0	10 P2
ONTO TAXIWAY D AND	4B 03	10	10 P1	4M	04	15	10 P4
TAXI TO RAMP	4D 28	1	08	10 P2	4B	08	10 P1
230002 AFTER LNDG PROC.	4F 01	1	10 P4	7E	16	0	10CP3
	7M 17	3	10CP1	7M	18	5.5	10CP1
	7L 13	4	10 P4	7G	16	8.5	10CP2
	6A 09	10	10CP1	1N	01	12.37	10CP1
	4F 12	14.30	10CP1	4E	06	16.30	10CP3
	7B 24	6.5	10 P1			10	
	7B 34	7.2	10 P3	7B	25	7.8	10 P1
230003 TURN OFF TAXIWAY D	8A 02	0	10 P2			10	
ONTO RAMP AND TAXI	4B 03	5	10 P4	4M	04	0	10 P1
TO ARRIVAL GATE	4D 28	2	20	10 P2	4B	08	2
230004 TAXI UP TO GATE	4M 01	0	10 P4	4B	03	0	10 P4
23EK01 TURN OFF OF RWY 08	4M 03	0	10CP4	8A	07	0	10CP2
ONTO TAXIWAY D AND	4B 07	10	10CP1	4M	04	13	10CP4
TAXI TO RAMP. - A	4D 28	1	18	10CP1	4B	07	1
23EK02 AFTER LANDING PROC -	7E 16	0	10CP3	7M	17	3	10CP1
A	7M 18	5.5	10CP1	7L	22	7	10CP1
	7G 16	8.5	10CP2	6A	09	10	10CP1
	1H 01	12.37	10CP1	4F	12	14.3	10CP1
	4E 06	16.3	10CP3	7B	34	19	10CP1
	7B 25	20.75	10CP1			10	
23EK03 TURN OFF OF TAXIWAY	4D 28	0	10CP1	8A	07	0	10CP3
D AND ONTO RAMP AND	4B 07	5	10CP1	4M	04	5	10CP1
TAXI TO GATE - A		10	4B	08	2	26	10CP2
23EK04 TAXI UP TO GATE	4M 03	0	10CP4	4B	07	0	10CP1

DUMMY	DUMMY PROCEDURE	8A 07	0 10CP4	10
		8F DUMMY	1 10 *1	10

TASKS										
1A	01 MON VHF-1L FREQ IND	1	.76	90				5		
		2	4.03	90				5		
		3	4.09	90				5		
1A	02 SET VHF-1L FREQ -	1	2.05	10	100			5		P
	WHOLE NO.S	2	2.98	10	100			5		CP
		3	2.05	10	100			5		CP
1A	03 SET VHF-1L FREQ -	1	1.98	10	100			5		CP
	FRACTIONS	2	1.98	10	100			5		CP
1A	04 ADJ VHF-1 VOLUME	1	2.08	10	100			5		
		2	2.11	10	100			5		P
1A	05 SET VHF-1 COMM TFR	1	2.39	20	100			5		
	SW TO LEFT	2	1.43	20	100			5		
		3	2.39	20	100			5		
		4	1.43	20	100			5		
1A	06 SET VHF-1 COMM TFR	1	2.39	100	100			5		
	SW TO RIGHT	2	1.43	100	100			5		
		3	2.30	100	100			5		
		4	1.43	100	100			5		
1A	07 MON VHF-1R FREQ IND	1	.76	90				5		
		2	4.86	90				5		
		3	4.96	90				5		
		4	3.99	90				5		
1A	08 SET VHF-1R FREQ.	1	2.98	10	100			5		
	WHOLE NO.S	2	2.01	10	100			5		
		3	2.98	10	100			5		
		4	2.01	10	100			5		
1A	09 SET VHF-1R FREQ -	1	1.98	10	100			5		CP
	FRACTIONS	2	1.98	10	100			5		
		3	2.11	10	100			5		
1A	10 ACT PUSH-TO-TALK SW	1	3.5					5		P
		2	5.0					5		
		3	1.7					5		
		4	2					5		
1A	11 COMM VIA VHF-1	1	5.					5		
		2	12.							
		3	1.7							
		4	7.							
1A	12 COMM VIA VHF-1	1	3.5							
		2	3.0							
		3	6							
1A	14 MON VHF-1 COMM AUDIO	1	17.							
		2	6.							
		3	7.							
		4	3.							
1A	15 MON VHF-1 COMM AUDIO	1	5.							
		2	4.							
		3	24							
		4	2.5							
1A	17 SET COMM 2 VHF-1	1	2.39	100	100			5		CP
	COMM RECVR SW TO ON	2	1.52	100	100			5		P
		3	2.09	100	100			5		P
		4	1.60	100	100			5		CP
1A	18 SET COMM 2 VHF-1	1	2.39	100	100			5		
	COMM RCVR SW TO OFF	2	1.52	100	100			5		
		3	2.09	100	100			5		
		4	1.60	100	100			5		
1A	19 SET COMM 2 MIC SEL	1	2.86	100	100			5		CP
	SW TO VHF-1	2	1.99	100	100			5		P
		3	2.92	100	100			5		P

		4	1.99	100	100	5
1A	20 ACT COMM 2 PTT SW	1	1.42	20	100	5
		2	1.50	20	100	5
		3	1.42	20	100	5
		4	2.35	20	100	5
1A	21 SET COMM BOOM/OXY	1	1.50	100	100	5
	SW TO BOOM					5
1A	22 SET COMM 2 BOOM/OXY	1	1.50	100	100	5
	SW TO OXY	2	2.35	100	100	5
1A	23 ADJ COMM 2 MIC VOL	1	2.04	10	100	5
1A	24 ACT COMM 2 PUSH-TO-TALK SW	1	6.42	10	100	5
		2	13.42	10	100	5
		3	3.12	10	100	5
1A	25 ACTUATE COMM 2 PUSH-TO-TALK SW	1	7.	10	100	5
		2	1.7	10	100	5
		3	2.35	10	100	5
		4	3.0	10	100	5
1A	26 ACT B/O PTT SW	1	1.0	10	100	5
		2	1.5	10	100	5
		3	2.0	10	100	5
		4	2.5	10	100	5
1A	27 ACT B/O PTT SW	1	3.0	10	100	5
		2	3.5	10	100	5
		3	4.0	10	100	5
		4	4.5	10	100	5
1A	28 ACT B/O PTT SW	1	1.0	10	100	5
		2	1.5	10	100	5
		3	2.0	10	100	5
		4	2.5	10	100	5
1A	29 ACT B/O PTT SW	1	3.0	10	100	5
		2	3.5	10	100	5
		3	4.0	10	100	5
		4	4.5	10	100	5
1B	01 MON VHF-2L FREQ IND	1	.76	90		5
		2	4.88	90		5
		3	5.08	90		5
1B	02 SET VHF-2L FREQ-WHOLE NO.S	1	2.20	10	100	5
		2	2.90	10	100	5
		3	2.40	10	100	5
		4	3.10	10	100	5
1B	03 SET VHF-2L FREQ - FRACTIONS	1	1.98	10	100	5
		2	1.98	10	100	5
1B	04 ADJ VHF-2 VOLUME	1	2.00	10	100	5
		2	2.09	10	100	5
		3	2.09	10	100	5
		4	2.19	10	100	5
1B	05 SET VHF-2 COMM TFR SW TO LEFT	1	1.45	10	100	5
		2	2.39	10	100	5
		3	1.49	10	100	5
		4	2.39	10	100	5
1B	06 SET VHF-2 COMM TFR SW TO RIGHT	1	1.45	10	100	5
		2	2.39	10	100	5
		3	1.49	10	100	5
		4	2.39	10	100	5
1B	07 MON VHF-2R FREQ IND	1	.76	100		5
		2	4.01	90		5
		3	4.86	90		5
1B	08 SET VHF-2R FREQ - WHOLE NO.S	1	2.03	10	100	5
		2	2.88	10	100	5
		3	2.03	10	100	5

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		4	2.98	10	100	5
1B	09 SET VHF-2R FREQ -	1	1.98	10	100	5
	FRACTIONS	2	1.98	10	100	5
1B	10 SET COMM 2 MIC-SEL	1	2.86	100	100	5
	SW TO VHF-2	2	1.99	100	100	5
		3	2.92	100	100	5
1B	11 SET COMM 2 VHF-2	1	2.09	100	100	5
	COMM RECVR SW TO ON	2	1.52	100	100	5
		3	2.39	100	100	5
		4	1.44	100	100	5
1B	12 SET COMM VHF-2 COMM	1	2.39	100	100	5
	RCVR SW TO OFF	2	1.44	100	100	5
		3	2.09	100	100	5
		4	1.52	100	100	5
1B	13 ACT COMM 2 PTT SW	1	1.42	10	100	5
		2	2.30	10	100	5
		3	1.42	10	100	5
		4	3.50	10	100	5
1B	14 ACT PUSH-TO-TALK SW	1	4.8		100	5
	ON HANDGRIP	2	2.5		100	5
		3	1.5		100	5
		4	1.7		100	5
1B	15 COMM VIA VHF-2	1	4.8			5
		2	2.5			
		3	1.5			
		4	1.7			
1B	16 COMM VIA VHF-2	1	3.5			
		2	2.3			
		3	4.5			
		4	2.8			
1B	17 COMM VIA VHF-2	1	7.0			
		2	5.0			
		3	4.0			
		4	6.0			
1B	18 MON VHF-2 COMM AUDIO	1	30.			
		2	2.5			
		3	6.0			
		4	3.5			
1B	19 MON VHF-2 COMM AUDIO	1	3.2			
		2	7.0			
		3	6.2			
		4	10.			
1B	20 MON VHF-2 COMM AUDIO	1	5.			
		2	5.5			
		3	1.7			
		4	3			
1B	21 SET COMM 2 BOOM/OXY	1	1.50	100	100	5
	SW TO BOOM	2	2.42	100	100	5
		3	1.47	100	100	5
		4	1.47	100	100	5
1B	22 SET COMM 2 BOOM/OXY	1	1.40	100		5
	SW TO CXY	2	1.47	100		5
		3	1.50	100		5
		4	2.42	100		5
1B	23 ADJ COMM 2 MIC VOL	1	1.97	10	100	5
		2	2.04	10	100	5
1B	24 ACT PUSH-TO-TALK SW	1	4.5		100	5
	ON CONTROL HANDGRIP	2	2.8		100	5
		3	6.2		100	5
		4	3.5		100	5

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1B	25	ACT PUSH-TO-TALK SW	1	5		100	5	
		ON CONTROL HANDGRIP	2	4		100	5	
			3	6		100	5	
			4	4.2		100	5	
1B	26	ACT PUSH-TO-TALK SW	1	7		100	5	
		ON CONTROL HANDGRIP	2	3		100	5	
			3	10		100	5	
			4	7.5		100	5	
1B	28	ACTUATE COMM 2 PUSH-	1	5.0		100	5	
		TO-TALK SW	2	6.0		100	5	
			3	4		100	5	
			4	4.25		100	5	
1B	29	ACTUATE COMM 2 PUSH-	1	1.7		100	5	
		TO-TALK SW	2	3.5		100	5	
			3	1.5		100	5	
			4	3		100	5	
1B	32	COMM VIA VHF-2	1	4.2				
			2	3				
			3	10				
			4	7.5				
1B	33							
1B	34							
1B	35							
1B	36	MONITOR VHF-2 COMM	1	11				
		AUDIO	2	2				
			3	12				
			4	6.5				
1B	37	MONITOR VHF-2 COMM	1	16				
			2	4				
			3	15				
			4	3.7				
1B	38	ACC CNTL WHEEL	1	8.3	100		5	
		COMM SWITCH					5	
1B	39	COMM VIA VHF-2	1	8.3			5	100
							5	
		AUDIO	2	4			5	
			3	15			5	
			4	3.7			5	
1F	01	MON COCKPIT CALL	1	1.00			5	100
		CHIME					5	
1F	02	MON COCKPIT CALL	1	.71	100		5	P
		ANNUN LT ON					5	
1F	03	ACT ATTENDANT CALL	1	2.35	100	100	5	P
		SW					5	
1F	04	SET SERVICE INTPHN	1	2.92	100	100	5	P
		SW TO ON					5	
1F	05	SET SERVICE INTPHN	1	2.92	100	100	5	
		SW TO OFF					5	
1F	06	SET COMM 2 MIC SEL	1	2.86	100	100	5	CP
		SW TO INT	2	2.92	100	100	5	P
			3	1.99	100	100	5	P
1F	07	SET COMM 2 INT COMM	1	2.44	100	100	5	
		RECVR SW TO ON	2	1.55	100	100	5	
			3	2.34	100	100	5	
1F	08	SET COMM 2 INT COMM	1	2.44	100	100	5	
		RECVR SW TO OFF	2	1.55	100	100	5	
			3	2.34	100	100	5	
1F	09	MON INT COMM AUDIO	1	.8			5	
			2	.9			5	
			3	1.5			5	

1F	10	MON INT COMM AUDIO						5	
1F	11	INTPHN COMM	1	1.4				5	
			2	1.3				5	
			3	1.3				5	
1G	01	SET COMM 2 PA COMM	1	1.41	100	100		5	P
		RECVR SW TO ON	2	1.45	100	100		5	
1G	02	SET COMM 2 PA COMM	1	1.41	100	100		5	
		RECVR SW TO OFF	2	1.97	100	100		5	
1G	03	SET COMM 2 MIC SEL	1	2.32	100	100		5	
		SW TO PA	2	2.92	100	100		5	P
			3	1.99	100	100		5	P
1G	04	ACTUATE HANDMIKE SW						5	
		FOR PUBLIC ADDRESS						5	
		ANNOUNCEMENT						5	
1G	06	PICK UP PA HANDMIKE	1	3.08	100	100		5	CP
			2	2.58	100	100		5	P
			3	5.06	100	100		5	P
1G	07	RETURN PA HANDMIKE	1	3.08	100	100		5	
		TO CRADLE	2	2.58	100	100		5	
			3	5.06	100	100		5	
1G	08	SET COMM 2 PA COMM	1	1.41	100	100		5	CP
		RECVR SW TO ON						5	
1G	09	SET COMM 2 PA COMM	1	1.41	100	100		5	
		RECVR SW TO OFF						5	
1G	10	SET COMM 2 MIC SEL	1	2.86	100	100		5	CP
		SW TO PA						5	
1G	11	PRESS COMM 2 PRESS-	1	1.42	100	100		5	CP
		TO-TALK SW FOR PA	2	1.42	100	100		5	P56
1G	12	SET COMM RCVR SW ON	1	1.41	50	100		5	
1G	13	SET COMM RCVR SW ON	1	2.5	50	100		5	
			2	3.0	50	100		5	
			3	2.5	50	100		5	
			4	3.0	50	100		5	
1H	01	ACTUATE GRD CALL SW	1	2.37	20	100		5	P
			2	2.37	20	100		5	
1J	01	ACTUATE VOICE REC	1	1.49	100	100		5	CP
		TEST SW						5	
1J	02	MON VOICE REC	1	2.03	100			5	CP
1M	01	MON VHF 1 SELCAL LT	1	.53	100			5	P
		ON	2	1.05	100			5	CP
1M	02	MON VHF 2 SELCAL LT	1	1.71	100			5	CP
		ON	2	1.05	100			5	CP
1M	03	MONITOR SELCAL CHIME	1	1.00				5	100
1M	04	COMM VIA SELCAL						5	
1M	05	PUSH VHF 1 SELCAL	1	2.22	100	100		5	P
		TEST/RESET SW	2	2.30	100	100		5	CP
1M	06	PUSH VHF 2 SELCAL	1	2.22	100	100		5	CP
		TEST/RESET SW						5	
1N	01	SET ATC FUNCTION SEL	1	1.93	100	100		5	CP
		SW TO OFF						5	
1N	02	SET ATC FUNCTION SEL	1	1.93	100	100		5	
		SW TO STDBY	2	1.93	100	100		5	1N
1N	03	SET ATC FUNCTION SEL	1	1.93	100	100		5	
		SW TO ON						5	
1N	04	SET ATC FUNCTION SEL	1	1.93	100	100		5	
		SW TO LO SENS						5	
1N	05	SET ATC IDENT CODE	1	2.80	10	100		5	C
			2	2.04	10	100		5	CP3
1N	06	MON IDENT CODE INDIC	1	.77	100			5	CP
			2	2.04	90			5	

1N	07	PRESS ATC IDENT SW	3	2.80	90	5	
			1	2.14	50 100	5	CP
			2	1.41	50 100	5	CP
1N	08	SET ATC MODE SEL SW	1	2.61	100 100	5	CP
		TO A				5	
1N	09	SET ATC MODE SEL SW	1	2.61	100 100	5	
		TO B				5	
1N	10	SET ATC MODE SEL SW	1	2.61	100 100	5	
		TO C				5	
1N	11	SET ATC MODE SEL SW	1	2.61	100 100	5	
		TO D				5	
1N	12	SET ATC TRANSPONDER	1	1.93	100 100	5	CP
		SEL TO NO.1				5	
1N	13	SET ATC TRANSPONDER	1	1.93	100 100	5	
		SEL TO NO.2				5	
1N	14	SET ATC ALT REPTG	1	1.57	100 100	5	CP
		SOURCE SW TO NO.1				5	
1N	15	SET ATC ALT REPTG	1	1.57	100 100	5	
		SOURCE SW TO NO.2				5	
1N	16	SET ATC TEST SW TO	1	1.50	80 100	5	CP
		TEST				5	
1N	17	SET ATC TEST SW TO	1	1.50	80 100	5	
		MONITOR				5	
1N	18	MON ATC TEST LT ON	1	1.50	20	5	
1P	01	MONITOR INSTRUCTIONS	1			5	
			2			5	
			3			5	
			4			5	
1P	02	MON VERBAL REPORT	1	1.5		5	100
			2	2.0		5	100
			3	3.0		5	100
			4	1.3		5	100
1P	03	ACKNOWLEDGE	1	.50		5	
			2			5	
			3			5	
			4			5	
1P	04	MON VERBAL REPORT	1	2.8		5	100
			2	2.2		5	100
			3	1.8		5	100
			4			5	
1P	05	MON VERBAL REPORT	1	5.0		5	100
			2	6.2		5	100
			3	4.0		5	100
			4			5	
1P	06	MON VERBAL REPORT	1	2.50		5	100
			2	6.0		5	100
			3	1.0		5	100
			4	.5		5	100
1P	07	MON VERBAL REPORT	1	4.5		5	100
			2	.7		5	100
			3	2.3		5	100
			4	.8		5	100
1P	08	MON VERBAL REPORT	1	.9		5	100
			2	1.6		5	100
			3	1.2		5	100
			4	.6		5	100
1P	09	MON VERBAL REPORT	1	1.3		5	100
			2	1.4		5	100
			3	10		5	100
			4	1.9		5	100

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1P	10 MON VERBAL REPORT	1	1.0	5	100	
		2	.7	5	100	
		3	1.2	5	100	
		4	.6	5	100	
1P	11 MON VERBAL REPORT	1	.5	5	100	
		2	.8	5	100	
		3	.9	5	100	
		4	1.7	5	100	
1P	12 MON VERBAL REPORT	1	2.5	5	100	
		2	1.4	5	100	
		3	2.2	5	100	
		4	1.1	5	100	
1P	13 MON VERBAL REPORT	1	2.3	5	100	
		2	2.4	5	100	
		3	3.5	5	100	
		4	1.8	5	100	
1P	14 MON VERBAL REPORT	1	1.9	5	100	
		2	.4	5	100	
		3	1.6	5	100	
		4	2.1	5	100	
1P	15 MON VERBAL REPORT	1	2.7	5	100	
		2	3.7	5	100	
		3	4.2	5	100	
		4	3.2	5	100	
1P	16 MON VERBAL REPORT	1	.4	5	100	
		2	.3	5	100	
		3	.3	5	100	
		4	1.5	5	100	
1P	17 MON VERBAL REPORT	1	3.5	5	100	
		2	3.7	5	100	
		3	.4	5	100	
		4	.2	5	100	
1P	18 MON VERBAL REPORT	1	1.1	5	100	
1P	19 MON VERBAL REPORT	1	.4	5	100	
		2	1.5	5	100	1P
		3	4.5	5	100	
1P	20 MON VERBAL REPORT	1	2.00	5	100	1P
1P00IV01	CALL-OUT TRAFFIC	1	.2	10	100	
	SITUATION NORMAL			10		
1P00IV02	CALL-OUT TRAFFIC	1	.2	10	100	
	CONFLICT X 0'CLOCK			10		
1PXXXX01	CALLOUT - GET THE	1	1.5	10	100	
	CHECKLIST			10		
1PXXXX02	RPT- CHKLST COMP	1	1.0	10	100	
1PXXXX03	RPT- OH	1	.5	10	100	
1PXXXX04	RPT- OFF	1	.5	10	100	
1PXXXX05	RPT- SET	1	.5	10	100	
1PXXXX06	RPT- SET AND CHKD	1	1.0	10	100	
1P00BA01	CALL OUT- FUEL HEAT	1	2.3	10	100	
	VALVE CHKLST			10		
1P00BA02	READ ITEM- ENGINE	1	2.0	10	100	
	OIL TEMP LMTS			10		
1P00BA03	CALL OUT- OIL TEMP	1	1.5	10	100	
	O K			10		
1P00BB01	CALL OUT- MINIMUM	1	1.5	10	100	
	FUEL GO-AROUND			10		
1P00BB02	REPORT- MIN FUEL	1	1.5	10	100	
	GO-AROUND CHKLST			10		
1P00BB03	CALL OUT- FUEL	1	1.0	10	100	
	PUMPS			10		

1P00BB04	REPORT- PUMPS ON	1	1.0	10	
1P00BB05	CALL OUT- FUEL	1	2.0	10	
	CROSSFEED SELECTOR			10	
1P00BB06	REPORT OPEN	1	.5	10	100
1P00BB07	REPORT AVOID SUSTAIN	1	2.3	10	100
	-ED HIGH NOSE-UP			10	
	ATTITUDES			10	
1P00BB08	ACKNOWLEDGE ROGER	1	2.5	10	100
	AVOID SUSTAINED HIGH			10	
	NOSE-UP ATTITUDES			10	
1P00BC01	RPT- FILTER ICING	1	1.5	10	100
	CHKLST			10	
1P00BC02	READ- FUEL HEAT SW	1	1.0	10	100
1P00BD01	RPT- FUEL GAGES SHOW	1	2.8	10	100
	FUEL XFR PROBLEM,			10	
	GET CHKLST			10	
1P00BD02	RPT- INADVERTENT XFR	1	2.5	10	100
	OF FUEL TO CNTR TANK			10	
	CHKLST			10	
1P00BD03	READ- AFFECTED MAIN	1	1.6	10	100
	BOOST PUMPS			10	
1P00BD04	READ- CNTR TANK	1	2.2	10	100
	BOOST PUMPS			10	
1P00BD05	READ- RESET CIRCUIT	1	2.4	10	100
	BREAKER IF NECESSARY			10	
1P00BD06	RSPND- ROGER RESET	1	2.6	10	100
	CIRCUIT BREAKER IF			10	
	NEEDED			10	
1P00BD07	READ- MAIN TANK	1	1.3	10	100
	BOOST PUMPS			10	
1P00BD08	READ- XFEED VALVE	1	2.0	10	100
	REMAINS CLOSED			10	
1P00BD09	RSPND- ROGER XFEED	1	2.0	10	100
	VALVE CLOSED			10	
1P00CB01	RPT- CSD LOW PRESS/	1	3.0	10	100
	HIGH TEMP LT CHKLST			10	
1P00CB02	READ- GENERATOR	1	2.0	10	100
	DRIVE DISCONNECT SW			10	
1P00CB03	RPT- DISCONNECT	1	.5	10	100
1P00CB04	READ- APU	1	1.0	10	100
1P00CB05	RPT- APU GEN START	1	1.8	10	100
	AND ON BUS			10	
1P00CD01	RPT- STDBY POWER LT	1	1.8	10	100
	OFF CHKLST			10	
1P00CD02	READ- STDBY PWR SW	1	1.5	10	100
1P00CD03	RPT- BATTERY	1	.5	10	100
1P00CE01	RPT- BUS OFF LT	1	1.5	10	100
	CHKLST			10	
1P00CE02	READ- GENERATOR SW	1	1.0	10	100
1P00CE03	READ- IF LT TRIPS ON	1	2.5	10	100
	AGAIN APU START AND			10	
	ON BUS			10	
1P00CE04	RSPND- ROGER APU ON	1	2.2	10	100
	BUS IF GEN NOT RESET			10	
1P00CE05	RPT- GENERATOR RESET	1	1.2	10	100
	TO ON			10	
1P00CF01	RPT- XFR BUS OFF LT	1	2.0	10	100
	CHKLST			10	
1P00CF02	READ- XFR BUS SW	1	2.5	10	100
	RESET TO AUTO			10	

1P00CF03	RPT- SW RESET	1	1.0	10	100
1P00CG01	RPT- EQUIPMENT COOL- ING OFF LT CHKLST	1	2.5	10	100
1P00CG02	READ- EQUIP COOLING SW TO ALT	1	1.8	10	100
1P00CG03	RPT- COOLING SW ALT	1	1.5	10	100
1P00DA01	RPT- LOSS HYDRAULIC SYSTEM-A CHKLST	1	2.0	10	100
1P00DA02	READ- SYS-A FLT CHTRLS - STDBY RDR	1	3.0	10	100
1P00DA03	RPT- FLT CNTRL A ON STDBY	1	2.0	10	100
1P00DA04	READ- HYD PUMPS OFF	1	2.0	10	100
1P00DA05	READ- AUTOPILOT HYD SYS SELECT SYS-B	1	3.0	10	100
1P00DA06	RPT- AUTO ON SYS-B	1	2.0	10	100
1P00DA07	ADVISE- GROUND SPOIL ERS AND NOSE WHEEL STEING ARE INOP	1	3.5	10	100
1P00DA08	THRUST REVERSERS HAVE ACCUMULATOR PRESSURE INBOARD BRAKES HAVE	1	3.5	10	100
1P00DA09	ACCUMULATOR PRESSURE CHECK WEATHER, PLAN FLAPS 15 LANDING	1	3.5	10	100
1P00DA10	RPT- ROGER GROUND AND INBD FLT SPOILER OUT. ACCUMULTOR PRESSURE FOR THRUST REVERSER AND INBOARD	1	4.0	10	100
1P00DA11	BRAKES. PLAN FOR FLAPS 15 LANDING.	1	4.0	10	100
1P00EC01	READ- PREPARE FOR LOSS OF ALL BUT STBY PWR AND FOR USE OF MANUAL TRIM	1	5.0	10	100
1P00EC02	READ- PITOT STATIC HEAT WILL BE INOP	1	2.0	10	100
1P00EC03	ADVISE- ROGER, LOSS OF GENERATORS POSSIB LE WITH ONLY STDBY AND BATT AVAILABLE	1	4.5	10	100
1P00EC04	UNDERSTAND ELEC TRIM OUT AND PITOT HEAT WILL BE INOP	1	3.5	10	100
1P00EC05	READ- BUS XFR SW OFF	1	2.0	10	100
1P00EC06	READ- WAIT A REASON- ABLE TIME TO DETERMI NE WETHER TO FOLLOW STEP A OR B BELOW	1	4.5	10	100
1P00EC07	RESTORE POWER SLOWLY NOTING IF SMOKE OCCU RS AND MONITOR ELEC LOADS	1	5.0	10	100
1P00EC08	ADVISE- ROGER, RESTO RE POWER SLOWLY MON- ITORING FOR SMOKE AND ELEC LOADS	1	3.0	10	100
1P00EC09	READ- NO.2 GEN SW ON	1	2.0	10	100

1P00EC10	READ- IF SMOKE DOES	1	6.2	10	100
	NOT RECURR CONTINUE			10	
	WITH NO.1 GEN OFF.			10	
	ENG NO.1 RVRSR INOP			10	
1P00EC11	ADVISE-ROGER IF SMOK	1	4.5	10	100
	DIES LEAVE GEN#1 OFF			10	
	ENG#1 RVRSR INOP			10	
1P00EC12	READ- NO.1 GEN SW ON	1	2.0	10	100
1P00EC13	READ-NO.2 GEN SW OFF	1	2.0	10	100
1P00EC14	ADVISE- GEN#1 ON BUS	1	3.0	10	100
	GEN#2 OFF BUS			10	
1P00EC15	READ- CONTINUE FLT	1	4.5	10	100
	WITH GEN#2 OFF BUS			10	
	ENG#2 RVRSR INOP			10	
1P00EC16	READ-NO.2 GEN SW ON	1	2.0	10	100
1P00EC17	READ-NO.1 GEN SW ON	1	2.0	10	100
1P00EC18	ADVISE- V/G OPERTIV	1	1.5	10	100
1P00EC19	READ- STDBY PWR SW	1	2.0	10	100
	OFF			10	
1P00EC20	READ- BATT SW OFF	1	1.5	10	100
1P00EC21	READ- BUS XFR SW	1	2.0	10	100
	AUTO			10	
1P00EC22	READ- IF POSSIBLE	1	4.0	10	100
	RESTORE PWR TO ANY			10	
	PART OF THE A/C THAT			10	
	CAN OPERATE NORMAL			10	
1P00EC23	READ- WITH BATT SW	1	4.0	10	100
	OFF FIRE DETECT INOP			10	
	LAND AS SOON AS			10	
	POSSIBLE			10	
1P00EC24	READ- USE SMOKE EVAC	1	2.5	10	100
	UATION PROCEDURE IF			10	
	NECESSARY			10	
1P00EC25	ADVISE- ROGER, OPER-	1	4.0	10	100
	ATE SYSTEM NORMAL IF			10	
	POSSIBLE, FIRE DETEC			10	
	TION INOP			10	
1P00ED01	READ- OX MASKS AND	1	2.0	10	100
	SELECTORS ON - 100			10	
1P00ED02	READ- CREW COMMUNICA	1	2.0	10	100
	TIONS ESTABLISH			10	
1P00ED03	READ-PRESSURE MODE	1	2.0	10	100
	SELECT - MANUAL			10	
1P00ED04	READ-OUTFLOW VALVE	1	2.0	10	100
	CLOSE			10	
1P00ED05	READ-NO SMOKING,SEAT	1	3.0	10	100
	BELTS FASTEN SW - ON			10	
1P00ED06	READ- PASS OXYGEN	1	2.0	10	100
	(IF REQUIRED) ON			10	
1P00ED07	READ-START EMERGENCY	1	3.0	10	100
	DESCENT PROCEDURE IF			10	
	REQD			10	
1P00ED08	READ-CABIN ALTIMETER	1	3.5	10	100
	AND CLIMB INDIC -			10	
	MONITOR			10	
1P00ED09	READ-CREW OXYGEN SEL	1	2.0	10	100
	NORMAL			10	
1P00EE01	ADVISE-PASSENGERS	1	4.0	10	100
	AND CREW FASTEN SEAT			10	
	BELTS AND REMAIN			10	

1P00EE02	SEATED DURING DESCNT	1	3.0	10	
	READ-IF STRUCTURAL			10	100
	STRENGTH IN DOUBT			10	
	LIMIT SPEED AS MUCH			10	
	AS POSSIBLE			10	
1P00EE03	READ-REDUCE RATE OF	1	4.0	10	100
	DESCENT AND AVOID			10	
	HIGH MANUEVER LOADS			10	
1P00EE04	ADVISE-ROGER LIMIT	1	4.0	10	100
	SPEED, DESCENT, AND			10	
	G LOADS AS NEEDED			10	
1P00EE05	READ-START SWS FLT	1	1.5	10	100
1P00EE06	READ-THRST LVRS IDLE	1	1.5	10	100
1P00EE07	READ-SPD BRAKES FLT	1	1.5	10	100
1P00EE08	READ-TARGET SPD VMO	1	3.0	10	100
1P00EE09	READ-LEVEL OFF AT	1	4.5	10	100
	14000 OR MEA WHICH-			10	
	EVER HIGHER			10	
1P00EE10	READ-SPD BRAKES SET	1	2.0	10	100
	DOWN DETENT			10	
1P00EE11	READ-CREW OX NORMAL	1	1.5	10	100
1P00EE12	READ-START SWS AS	1	2.0	10	100
	REQUIRED			10	
1P00EF01	READ-MASTER FIRE	1	1.5	10	100
	WARNING - OFF			10	
1P00EF02	ADVISE- FIRE WARNING	1	1.5	10	100
	OFF			10	
1P00EF03	READ-FIRE WARN SW	1	3.0	10	100
	PULL AND ROTATE			10	
1P00EF04	READ-TO OVERRIDE	1	4.5	10	100
	FIRE SW LOCK, DEPRES			10	
	BUTTON WHILE PULLING			10	
	SWITCH			10	
1P00EF05	READ-ROTATE SW THRU	1	4.0	10	100
	MECHANICAL LIMIT AND			10	
	HOLD FOR AT LEAST			10	
	ONE SECOND			10	
1P00EG01	READ-MASTER FIRE	1	1.5	10	100
	WARN SW - RESET			10	
1P00EG02	READ-LNDG GEAR(MAX	1	4.5	10	100
	270 KTS) - DOWN			10	
1P00EG03	READ-DO NOT RETRACT	1	4.5	10	100
	LNDG GEAR UNTIL FIRE			10	
	IS OUT AND BRAKES			10	
	COOLED FOR 20 MIN			10	
1P00EG04	ADVISE-ROGER RETRACT	1	4.0	10	100
	LNDG GEAR AFTER			10	
	BRAKES COOLED AND			10	
	FIRE OUT			10	
1P00XX01	CALLOUT-HOW DO YOU	1	1.5	10	100
	HEAR ME			10	
1P00XX02	ADVISE-5 BY 5 HOW DO	1	2.0	10	100
	YOU HEAR ME			10	
1P00EX01	READ-OXYGEN MASKS ON	1	2.5	10	100
	REGULATOR SET ON 100			10	
1P00EX02	READ-SMOKE GOGGLES	1	1.5	10	100
	ON			10	
1P00EX03	READ-COCKPIT DOOR	1	1.5	10	100
	CLOSE			10	
1P00EX04	ADVISE-CREW COMM	1	1.5	10	100

	ESTABLISHED			10	
1P00EH01	READ-WINDOW SHOULD	1	4.0	10	100
	NOT BE OPENED UNLESS			10	
	SMOKE ORIGIN CONFIRM			10	
	ED TO BE IN COCKPIT			10	
1P00EH02	READ-NORMAL HOLDING	1	2.0	10	100
	AIRSPED - ESTAB			10	
1P00EH03	ADVISE-HOLDING AIR	1	1.5	10	100
	SPEED ESTABLISHED			10	
1P00EH04	READ-FIRST OFFICER	1	2.0	10	100
	SLIDING WINDOW OPEN			10	
1P00EH05	READ-PRESSURIZATION	1	2.5	10	100
	MODE SELECT - MAN			10	
1P00EH06	READ-CABIN ALT SELCT	1	4.0	10	100
	INCREASE MAX 10000			10	
1P00EH07	READ-CABIN RATE SEL	1	3.0	10	100
	ECT MAX INCREASE			10	
1P00EH08	READ-L AND R PACK	1	2.0	10	100
	SWS ON			10	
1P00EH09	READ-ENGINE THRUST	1	4.0	10	100
	(MAX POSSIBLE) ABOVE			10	
	1.2 EPR			10	
1P00EH10	READ-COCKPIT AIRCOND	1	2.5	10	100
	AND GASPAR OUTLETS			10	
	OPEN			10	
1P00FA01	RPT- GEAR SEAL LT ON	1	2.0	10	100
1P00FA02	RPT- GEAR SEAL LT ON	1	2.5	10	100
	CHKLST			10	
1P00FA03	READ- GEAR SEAL SW-	1	2.0	10	100
	NORMAL			10	
1P00FC01	RPT- SYB A/B SHOW	1	2.0	10	100
	LOW BRAKE PRESSURE			10	
1P00FC02	READ- LOSS OF SYS A/	1	2.0	10	100
	B BRAKE PRESS			10	
1P00FC03	READ- AUTO BRAKE OFF	1	1.5	10	100
1P00FC04	READ- BRAKES- APPLY	1	2.0	10	100
	STEADY PRESSURE			10	
1P00FG01	CALLOUT- ANTISKID LT	1	2.0	10	100
	ON			10	
1P00FG02	READ-ANTISKID INOP	1	2.5	10	100
	CHKLST			10	
1P00FG03	READ-AUTO BRAKE OFF	1	1.5	10	100
1P00FG04	READ-IF BRAKING	1	4.0	10	100
	ACTION ABNORMAL			10	
	DURING LNDG SET ANTI			10	
	SKID SWS TO OFF			10	
1P00FG05	READ- BRAKE WITH	1	1.5	10	100
	CAUTION			10	
1P00FF01	RPT- AUTOBRAKE INOP	1	2.5	10	100
	LIGHT ON			10	
1P00FF02	READ- AUTOBRAKE INOP	1	2.5	10	100
	CHECKLIST			10	
1P00GA01	READ- DUCT OVRHT LT	1	2.0	10	100
	CHKLST			10	
1P00GA02	READ-TRIP RESET SW	1	2.0	10	
	RESET			10	
1P00GA03	READ- TEMP SELECT	1	2.0	10	100
	MAN(CAS RQD)			10	
1P00GB01	READ- PACK TRIP	1	1.5	10	100
	CHKLST			10	

1P00GB02	READ- TEMP SELECT	1	1.5	10	100
	WARMER			10	
1P00GB03	READ- TRIP RESET SW	1	2.0	10	100
	RESET			10	
1P00GC01	READ- WING/BODY OVHT	1	2.0	10	100
	CHKLST			10	
1P00GC02	READ- ISOLATION	1	2.5	10	100
	VALVE- CLOSE			10	
1P00GC03	READ- BLEED SW OFF	1	1.5	10	100
1P00GD01	READ- BLEED TRIP	1	1.5	10	100
	CHKLST			10	
1P00GD02	READ- TRIP RESET SW	1	2.0	10	100
	RESET			10	
1P00GE01	READ- AUTO FAILCKLST	1	1.5	10	100
1P00GE02	READ- MODE SELECT	1	2.0	10	100
	STDBY			10	
1P00GF01	READ- OFF SCHEDULE	1	2.0	10	100
	DESCENT			10	
1P00GF02	READ- FLT ALT COUNTR	1	3.0	10	100
	- RESET TO BARO ALT			10	
1P00HA01	READ- ENGINE ANTI-	1	3.5	10	100
	ICE VALVE FAIL CKLST			10	
1P00HA02	READ- TOTAL AIR TEMP	1	4.5	10	100
	10C OR ABOVE SET N1			10	
	70 OR BELOW			10	
1P00JA01	CALLOUT- WINDOW XX	1	2.0	10	100
	CRACKING			10	
1P00JA02	READ WINDOW XX HEAT	1	2.5	10	100
	SW OFF			10	
1P00JA03	READ-REDUCE PRESS	1	4.5	10	100
	DIFFERENCE AS FOLLOWS			10	
	: CRAKED OUTER PANE			10	
	NO CHANGE			10	
1P00JA04	INNER PANE CRAKED,	1	4.5	10	100
	MAX DIFFERENCE 5 PSI			10	
	MAX ALT FL 230, BOTH			10	
	CRACKED MAX PRESSURE			10	
1P00JA05	DIFFERENTIAL 2 PSI	1	4.5	10	100
	MAX ALT 13000 DESCEN			10	
	D NORMALLY OBSERVE			10	
	WINDOW HT INOP PROC			10	
1P00JA06	ADVISE- OUTER PANE	1	2.0	10	100
	CRACKED CONTINUE			10	
	NORMAL FLT			10	
1P00JB01	READ- WINDOW OVRHT	1	2.0	10	100
	CHKLST			10	
1P00JB02	READ- WINDOW HT SW	1	2.0	10	
	OFF			10	
1P00JB03	ADVISE- DESCEND NOR-	1	3.0	10	100
	MAL, OBSERVE WINDOW			10	
	HT INOP PROC			10	
1P00KA01	ADVISE- STAB TRIM	1	2.0	10	100
	OUT			10	
1P00KA02	READ- MOVE CONTROL	1	4.5	10	100
	COLUMN SMOOTHLY AS			10	
	REQD TO MAINTAIN			10	
	AIRCRAFT ATTITUDE			10	
1P00KA03	READ- STAB TRIM SWS	1	2.0	10	100
	CUTOUT			10	
1P00KA04	READ- STABILIZER	1	2.0	10	100

	TRIM MANUALLY			10	
1P00KB01	ADVISE- I HAVE JAM-	1	3.5	10	100
	MED CONTROLS, HELP			10	
	ME BREAK THEM LOOSE			10	
1P00KB02	READ- JAMMED, STICKY,	1	3.0	10	100
	FAULTY CONTROLS-			10	
	OVERPOWER			10	
1P00KB03	READ- DO NOT TURN	1	4.5	10	100
	OFF ANY FLT CNTRL			10	
	POWER SWS			10	
1P00KC01	ADVISE- STABILIZER	1	4.0	10	100
	IS JAMMED OPEN MAN			10	
	TRIM HANDLE AND HELP			10	
	BREAK IT LOOSE			10	
1P00KC02	READ- BOTH PILOTS	1	4.0	10	100
	SIMULTANEOUSLY AT-			10	
	TEMPT TO BREAK STAB			10	
	JAM. RESTOW HANDLES.			10	
1P00KC03	READ- MAINTAIN IN-	1	2.5	10	100
	TRIM AIRSPEED UNTIL			10	
	START OF APPROACH			10	
1P00KC04	READ- ESTABLISH LNDG	1	3.0	10	100
	CONFIGURATION EARLY,			10	
	PLAN FLAPS 15 LNDG			10	
1P00KC05	ADVISE- ROGER, MAIN-	1	4.5	10	100
	TAIN AIRSPEED, PLAN			10	
	FLAPS 15 LNDG, ESTAB			10	
	LISH CONFIG EARLY			10	
1P00KL01	READ- MOVE FLAP LVR	1	4.5	10	100
	TO DETENT NEAREST			10	
	ACTUAL FLAP POS AND			10	
	LAND CORRESPOND VREF			10	
1P00KL02	READ- FOR FLAP POS	1	4.5	10	100
	LESS THAN 15 SET			10	
	VREF 40+55 KTS			10	
1P00KL03	ADVISE- ROGER, FLAPS	1	2.5	10	100
	LESS THAN 15 VREF40			10	
	+55			10	
1P00KX01	READ- ANTI-ICE	1	1.0	10	100
1P00KX02	ADVISE- SET	1	.5	10	100
1P00KX03	READ- AIR CONDITION-	1	2.0	10	100
	ING AND PRESSURIZ-			10	
	ATION			10	
1P00KX04	ADVISE- SET AND	1	1.5	10	100
	CHECKED			10	
1P00KX05	READ- START SWS	1	1.5	10	100
1P00KX06	ADVISE- FLT	1	.5	10	100
1P00KX07	READ- INBD LNDG LTS	1	2.5	10	100
	AT 10000- ON			10	
1P00KX08	READ- ALTIMETER AND	1	1.5	10	100
	INSTRUMENTS			10	
1P00KX09	ADVISE- SET AND CHKD	1	1.0	10	100
1P00KX10	READ- EPR AND IAS	1	2.0	10	100
	BUGS - VREF & 15			10	
1P00KX11	ADVISE- VREF&15 SET	1	2.5	10	100
1P00K 01	READ- ABNORMAL TYPE	1	2.0	10	100
	LNDG CHKLST			10	
1P00K 02	READ- RECALL	1	1.0	10	100
1P00K 03	ADVISE- CHECKED	1	1.0	10	100
1P00K 04	READ- SPEED BRAKES	1	1.0	10	100

1P00K 05	ADVISE- ARMED,GRN LT	1	1.0	10	100
1P00K 06	READ- FLAPS	1	1.0	10	100
1P00K 07	ADVISE-15, GRN & GRN	1	1.5	10	100
1P00K 08	REAR- GEAR	1	1.0	10	100
1P00K 09	ADVISE- DOWN,3GRN	1	1.0	10	100
1P00KC06	READ- ANTICIPATE	1	4.0	10	100
	HIGHER THAN NORMAL			10	
	ELEVATOR FORCES DUR-			10	
	ING APP AND LNDG			10	
1P00KC07	ADVISE- ROGER, ELEV	1	3.0	10	100
	FORCES MAY BE HIGHER			10	
	NORMAL			10	
1P00KD01	READ- LIMIT BANK	1	2.5	10	100
	ANGLE TO 15DEG			10	
	WHILE ON FINAL			10	
1P00KD02	ADVISE- ROGER BANK	1	2.5	10	100
	ANGLE LESS THAN 15			10	
1P00KM01	READ- LIMIT BANK	1	4.5	10	100
	ANGLE TO LESS THAN			10	
	15DEG BELOW 210KTS			10	
1P00KM02	ADVISE- ROGER BANK	1	4.0	10	100
	ANGLE LESS THAN 15			10	
	DEG UNDER 210 DEG			10	
1P00KM03	READ- IF PLACARDED	1	3.5	10	100
	TIRE SPEED EXCEEDED			10	
	TIRE FAILURE MAY			10	
	OCCUR			10	
1P00KM04	ADVISE- ROGER, TIRE	1	3.0	10	100
	FAILURE POSSIBLE IF			10	
	SPEED EXCEEDED			10	
1P00KN01	READ- FLT CONTROL	1	2.0	10	100
	LOW PRESSURE CHKLST			10	
1P00KN02	READ- FLT CONTROL SW	1	2.5	10	100
	- STDBY RUDDER			10	
1P00KN03	ADVISE- SYS A ON	1	1.5	10	100
	STDBY RUDDER			10	
1P00KP01	READ- YAW DAMPER LT	1	2.0	10	100
	CHKLST			10	
1P00KP02	READ- YAW DAMPER SW	1	2.0	10	100
	RESET TO ON			10	
1P00KP03	READ- YAW DAMPER LT	1	2.5	10	100
	STILL ON - SET YAW			10	
	DAMPER TO OFF			10	
1P00KP04	READ- DO NOT ENGAGE	1	2.5	10	100
	AUTOPILOT ABOVE			10	
	FL300			10	
1P00KQ01	ADVISE- STAB OUT OF	1	2.5	10	100
	TRIM GET CHKLST			10	
1P00KQ02	READ- STAB OUT OF	1	1.5	10	100
	TRIM CHKLST			10	
1P00KQ03	READ- COTROL COLUMN	1	2.0	10	100
	HOLD FIRMLY			10	
1P00KQ04	READ- AUTOPILOT	1	1.5	10	100
	DISENGAGE			10	
1P00KQ05	READ- STAB TRIM -	1	2.5	10	100
	AS REQD			10	
1P00KR01	ADVISE- SPEED BRAKE	1	2.5	10	100
	DID NOT ARM GET			10	
	CHKLST			10	
1P00KR02	READ- SPEED BRAKE	1	2.5	10	100

	NOT ARMED CHKLST			10	
1P00KR03	READ- SPEED BRAKE	1	3.0	10	100
	LVR - DOWN			10	
1P00KR04	READ- AT TOUCHDOWN	1	3.0	10	100
	SPEED BRAKE LVR UP			10	
1P00KS01	READ- MACH TRIM FAIL	1	1.5	10	100
	CHKLST			10	
1P00KS02	READ- AIRSPEED,	1	3.0	10	100
	LIMIT TO MACH .74			10	
				10	
1P010001	CALL OUT-CCOMPASS	1	2.5	10	100
	HDG IS XXX DEGREES!			10	
1P010002	CALL OUT- ALT ALTIMETER	1	2.5	10	100
	SETTING IS XXXX!			10	
1P010003	CALL OUT- SET V1 TO	1	6	10	100
	XXX KNOTS AND VR TO			10	
	XXX KNOTS!			10	
1P010004	CALL OUT- WHAT IS	1	1.5	10	100
	THE EPR SETTING!			10	
1P010005	CALL OUT- SET EPR	1	2.5	10	100
	AT XXX!			10	
1P010006	CALL OUT - BEFORE	1	2	10	100
	START CHECKLIST!			10	
1P010007	CALL OUT - INTERIOR	1	3	10	100
	AND EXTERIOR PRE-			10	
	FLIGHT CHECK!			10	
1P010008	CALL OUT INCOMPLETE	1	1	10	100
1P010009	CALL OUT - LIGHT	1	1.3	10	100
	TEST!			10	
1P010010	CALL OUT - CHECKED !	1	1	10	100
1P010011	CALL OUT - OXYGEN	1	1.3	10	
	AND INTERPHONE!			10	
1P010012	CALL OUT - CHECKED !	1	1	10	100
1P010013	CALL OUT - YAW DAM-	1	1	10	100
	PER !			10	
1P010014	CALL OUT - ON !	1	0.5	10	100
1P010015	CALL OUT - FUEL !	1	0.5	10	100
1P010016	CALL OUT - XXX LBS,	1	4.5	10	100
	OK FOR DISPATCH, ALL			10	
	PUMPS ON!			10	
1P010017	CALL OUT - GALLEY	1	0.7	10	100
	POWER !			10	
1P010018	CALL OUT - EMERG	1	1.2	10	100
	EXT LTS!			10	
1P010019	CALL OUT - ARMED !	1	0.6	10	100
1P010020	CALL OUT - SEAT	1	2	10	100
	BELT AND NO SMOKING			10	
	LTS!			10	
1P010021	CALL OUT - AUTO !	1	0.5	10	100
1P010022	CALL OUT - HYDRAU-	1	1	10	100
	LICS!			10	
1P010023	CALL OUT - AIR CON-	1	2	10	100
	DITIONING AND PRES-			10	
	SURIZATION!			10	
1P010024	CALL OUT - 1 PACK,	1	2.3	10	100
	BLEEDS ON, SET!			10	
1P010025	CALL OUT - AUTO-	1	0.5	10	100
	PILOT!			10	
1P010026	CALL OUT - NORMAL !	1	0.7	10	100
1P010027	CALL OUT - DISEN-	1	0.8	10	100

	GAGED!			10	
1P010028	CALL OUT- INSTRU-	1	0.8	10	1P0
	MENTS!			10	100
1P010029	CALL OUT - CROSS-	1	1	10	
	CHECKED!			10	100
1P010030	CALL OUT - ANTI-SKID	1	0.9	10	
1P010031	CALL OUT - AUTO	1	0.9	10	100
	BRAKES!			10	100
1P010032	CALL OUT- OFF!	1	0.5	10	
1P010033	CALL OUT - RADIOS,	1	2	10	100
	RADAR, AND TRANS-			10	100
	PONDER!			10	
1P010034	CALL OUT- SET AND	1	1.2	10	100
	STANDBY!			10	
1P010035	CALL OUT - SPEED	1	0.8	10	100
	BRAKE!			10	
1P010036	CALL OUT - DOWN	1	1	10	100
	DETENT!			10	
1P010037	CALL OUT - PARKING	1	0.7	10	100
	BRAKE!			10	
1P010038	CALL OUT - SET!	1	0.5	10	100
1P010039	CALL OUT - STAB TRIM	1	1.7	10	100
	CUTOUT SWITCHES!			10	
1P010040	CALL OUT - WHEEL	1	2	10	100
	WELL FIRE WARNING!			10	
1P010041	CALL OUT - RUDDER	1	1.5	10	100
	AND AILERON TRIM!			10	
1P010042	CALL - ZERO!	1	0.7	10	100
1P010043	CALL OUT - PAPERS!	1	0.8	10	100
1P010044	CALL OUT - ABOARD!	1	0.7	10	100
1P010045	CALL OUT - ZFW, EPR,	1	2.5	10	100
	AND IAS BUGS!			10	
1P010046	CALL OUT - AIRCON-	1	1.3	10	100
	DITIONING PACK!			10	
1P010047	CALL OUT - PACKS OFF	1	0.9	10	100
1P010048	CALL OUT - START	1	0.9	10	100
	PRESSURE!			10	
1P010049	CALL OUT - XXX PSI!	1	1.6	10	100
1P010050	CALL OUT - ANTI-COL-	1	1.2	10	100
	LISSION LT!			10	
1P010051	CALL OUT - BEFORE	1	1.7	10	100
	START CHECKLIST			10	
	COMPLETE!			10	
1P010052	CALL OUT - CONTINUE	1	1.7	10	100
	BELOW THE LINE!			10	
1P010053	INFORM GROUND CREW	1	1.4	10	100
	READY FOR PUSHBACK!			10	
1P010054	GROUND CREW REPORTS	1	0.8	10	100
	ROGER!			10	
1P010055	RADIO COMM - CLEAR-	1	5.0	10	100
	ANCE DELIVERY, THIS			10	
	IS NASA 515 AT GATE			10	
	X, IFR TO WASH NATL!			10	
1P010056	MON RADIO COMM- NASA	1	4.26	10	100
	515, IFR TO WASHING-			10	
	TON NATIONAL, CLEAR			10	
	AS FILED. CLIMB AND			10	
1P010057	MAINTAIN FIVE THOU-	1	5.68	10	100
	SAND FEET, NOISE			10	
	ABATEMENT PROCEDURES			10	

1P010058	ARE IN EFFECT. CON- TACT ATLANTA DEPAR- TURE ON ONE TWO FIVE POINT SEVEN, SQUAWK TWO TWO ONE POINT	1 5.68	10 10 100 10 10 10
1P010059	THREE, OVER!	1 1.42	10 100
1P010060	RADIO COMM - 4 NASA 515, ROGER, CLEARED AS FILED, MAINTAIN FIVE THOUSAND, NOISE	1 3.66	10 100 10 10 10
1P010061	ABATEMENT PROCEDURES IN EFFECT. CONTACT ATLANTA DEPARTURE ON ONE TWO FIVE POINT!	1 4.88	10 100 10 10 10
1P010062	MON RADIO COMM- 4 NASA 515, CLEARANCE CORRECT. CONTACT GROUND CONTROL ON	1 3.50	10 100 10 10 10
1P010063	ONE TWO ONE POINT NINER WHEN READY TO TAXI!	1 2.50	10 100 10 10 10
1P010064	RADIO COMM- 4 NASA 515, ROGER!	1 1.7	10 100 10 10 10
1P010065	MON RADIO COMM- 4 INFORMATION KILO? ONE SIX ONE ZERO OB- SERVATION, 3000	1 4.08	10 100 10 10 10
1P010066	SCATTERED, CEILING 5000 BROKEN, VISIBI- LITY TWO THREE, TEM- PERATURE FIVE NINER,	1 5.44	10 100 10 10 10
1P010067	WIND ONE ONE FIVE DEGREES AT SEVEN GUSTING TO ONE SIX, ALTIMETER TWO NINER	1 5.44	10 100 10 10 10
1P010068	EIGHT SIX. LANDINGS RUNWAYS ZERO EIGHT, NINER RIGHT. DEPAR- TURES RUNWAYS ZERO	1 5.44	10 100 10 10 10
1P010069	EIGHT, NINER LEFT. NOISE ABATEMENT PRO- CEDURES ARE IN EF- FECT. ADVISE CON-	1 5.44	10 100 10 10 10
1P010070	RADIO COMM - 4 ATLANTA GROUND CONTROL, THIS IS NASA 515 AT GATE X, REQUEST PERMIS-	1 4.00	10 100 10 10 10
1P010071	SION TO PUSHBACK. WE HAVE INFORMATION KILO, OVER!	1 3.00	10 100 10 10 10
1P010072	MON RADIO COMM- 4 NASA 515, ATLANTA GROUND, ROGER. CLEAR TO PUSHBACK. ADVISE	1 4.50	10 100 10 10 10
1P010073	SEVEN, SQUAWK TWO TWO ONE THREE, OVER!	1 2.44	10 100 10 10 10
1P010074	TROLLER ON INITIAL CONTACT YOU HAVE INFORMATION KILO !	1 4.08	10 100 10 10 10
1P010075	WHEN READY TO TAXI,	1 1.50	10 100

	OVER.!			10
1P010076	MON INTPH COMM -	1	.9	10 100
	φALL CLEAR!			10
1P020001	MON RADIO COMM -	1	4	10 100
	φATC CLEARS NASA 515			10
	AS FILED. SOCLE 9L			10
	DEPARTURE, ROUTE JAY			10
1P020002	EIGHT ONE SIX R	1	4	10 100
	JASON ONE STAR.			10
	CLIMB AND MAINTAIN			10
	FLIGHT LEVEL THREE			10
1P020003	THREE ZERO. CONTACT	1	4	10 100
	ATLANTA DEPARTURE ON			10
	125.7, SQUAWK 2213,			10
	OVER!			10
1P020004	RADIO COMM - φNASA	1	4	10 100
	515, ROGER. CLEARED			10
	AS FILED. SOCLE 9L			10
	DEPARTURE, ROUTE JAY			10
1P020005	EIGHT ONE SIX R,	1	4	10 100
	JASON ONE STAR.			10
	CLIMB AND MAINTAIN			10
	FLIGHT LEVEL THREE			10
1P020006	THREE ZERO. DEPAR-	1	4	10 100
	TURE ON 125.7,			10
	SQUAWK 2213, OVER.!			10
1P020007	CALL OUT-φFLIGHT	1	2	10 100
	PLAN ENTERED AND			10
	CHECKED!			10
1P020008	CALL OUT-φEADI!	1	1	10 100
1P020009	CALL OUT -φON AND	1	1	10 100
	CHECKED!			10
1P020010	CALL OUT -φMFD!	1	.6	10 100
1P020011	CALL OUT -φNCDU!	1	1	10 100
1P020012	CALL OUT- φAGCS!	1	1	10 100
1P020013	CALL OUT-φATT CWS!	1	1.2	10 100
1P030001	MON INTPHN COMM -	1	0.9	10 100
	φALL CLEAR!			10
1P030002	INTPHN COMM -	1	1.3	10 100
	φSTARTING NO.2!			10
1P030003	INTPHN COMM -	1	1.3	10 100
	STARTING NO.1!			10
1P030004	CALL OUT -φAFTER	1	1.5	10 100
	START CHECKLIST!			10
1P030005	CALL OUT -φELECTRI-	1	0.8	10 100
	CAL!			10
1P030006	CALL OUT- φGENERA-	1	1.2	10 100
	TORS ON!			10
1P030007	CALL OUT -φPITOT	1	0.9	10 100
	HEAT!			10
1P030008	CALL OUT- φANTI-ICE!	1	0.9	10 100
1P030009	CALL OUT -φHOT REQD!	1	1	10 100
1P030010	CALL OUT-φAIR CONDI-	1	1.6	10 100
	TIONING AND PRESSU-			10
	RIZATION!			10
1P030011	CALL OUT-φPACKS ON,	1	1.3	10 100
	FLT!			10
1P030012	CALL OUT -φSTART	1	0.9	10 100
	SWITCHES!			10
1P030013	CALL OUT -φFLT!	1	0.6	10 100

1P030014	CALL OUT - 4 APU!	1	0.8	10	100
1P030015	CALL OUT - 4 OFF!	1	.5	10	100
1P030016	CALL OUT - 4 START LEVERS!	1	1	10	100
1P030017	CALL OUT - 4 OFF!	1	0.5	10	100
1P030018	CALL OUT- 4 CHECKLIST COMPLETED!	1	1.4	10	100
1P040001	MON RADIO COMM - 4 NASA 515, CROSS RUNWAY ZERO EIGHT, OVER!	1	3.0	10	100
1P040003	RADIO COMM - 4 NASA 515, ROGER!	1	1.7	10	100
1P040030	MON RADIO COMM- 4 NASA 515, HOLD SHORT OF NEXT INTER- SECTION, CLEARED	1	3.0	10	100
1P040031	BEHIND EASTERN TRI- JET, OVER!	1	2.0	10	100
1P040032	MON RADIO COMM - 4 NASA 515, CONTACT ATLANTA TOWER ON ONE ONE NINER POINT	1	3.0	10	100
1P040033	FIVE, OVER.!	1	1.0	10	100
1P040034	RADIO COMM - 4 NASA 515 ROGER, ONE ONE NINER POINT FIVE.!	1	3.0	10	100
1P040035	RADIO COMM - 4 ATLANTA GROUND CONTROL, NASA 515 READY TO TAXI, OVER!	1	3.50	10	100
1P040036	MON RADIO COMM - 4 NASA 515, TAXI TO RUNWAY NINER LEFT VIA NORTHEAST-SOUTH-	1	3.50	10	100
1P040037	WEST TAXIWAY. HOLD SHORT OF RUNWAY ZERO EIGHT, OVER!	1	3.50	10	100
1P040038	RADIO COMM - 4 NASA 515, ROGER. TAXI RUNWAY NINER LEFT, HOLD SHORT RUNWAY	1	3.75	10	100
1P040039	ZERO EIGHT.!	1	1.25	10	100
1P070001	CALL OUT - 4 80 KNOTS!	1	1.1	10	100
1P070002	CALL OUT - 4 V1!	1	0.9	10	100
1P070003	CALL OUT - 4 VR!	1	0.9	10	100
1P070004	CALL OUT - 4 GEAR UP!	1	1.1	10	100
1P070005	RADIO COMM - 4 ATLANTA TOWER, THIS IS NASA 515. READY FOR TAKE- OFF, RUNWAY NINER	1	3.6	10	100
1P070006	LEFT, OVER!	1	1.2	10	100
1P070007	MON RADIO COMM - 4 NASA 515, TAXI INTO POSITION AND HOLD, OVER!	1	2.5	10	100
1P070008	RADIO COMM - 4 515, TAXI INTO POSITION AND HOLD, ROGER!	1	2.5	10	100
1P070009	MON RADIO COMM -	1	2.5	10	100

	✧NASA 515 CLEARED		10	
	FOR IMMEDIATE TAKE-		10	
	OFF!		10	
1P070010	RADIO COMM -✧515	1 1.5	10	100
	ROLLING!		10	
1P070011	CALL OUT -✧TAKEOFF	1 1	10	100
	FLAPS!		10	
1P070012	CALL OUT -✧BEFORE	1 1.5	10	100
	TAKEOFF CHECKLIST!		10	
1P070013	CALL OUT- ✧RECALL!	1 1	10	100
1P070014	CALL OUT-✧CHECKED!	1 0.8	10	100
1P070015	CALL OUT-✧FLIGHT	1 1	10	100
	CONTROLS!		10	
1P070016	CALL OUT-✧FLAPS!	1 0.6	10	100
1P070017	CALL OUT -✧15, GREEN	1 1	10	100
	LIGHT!		10	
1P070018	CALL OUT-✧STABILIZER	1 1.2	10	100
	TRIM!		10	
1P070019	CALL OUT-✧COCKPIT	1 1	10	100
	DOOR!		10	
1P070020	CALL OUT-✧LOCKED!	1 0.7	10	100
1P070021	CALL OUT-✧TAKEOFF	1 1	10	100
	BRIEFING!		10	
1P070022	CALL OUT-✧FLY RUN-	1 4.5	10	100
	WAY HEADING UNTIL		10	
	CROSSING RUNWAY 27R		10	
	MIDDLE MARKER. TURN		10	
1P070023	TO HEADING 105 AND	1 5.5	10	100
	CLIMB AND MAINTAIN		10	
	5000. EXPECT VECTORS		10	
	AFTER NEW HEADING!		10	
1P070024	CALL OUT-✧ROGER!	1 0.6	10	100
1P070025	CALL OUT-✧TRANSPON-	1 1.5	10	100
	DER AND RADAR!		10	
1P070026	CALL OUT- ✧OH!	1 0.5	10	100
1P070027	CALL OUT-✧INBOARD	1 1.5	10	100
	LANDING LIGHTS!		10	
1P070028	CALL OUT-✧BEFORE	1 2.2	10	100
	TAKEOFF CHECKLIST		10	
	COMPLETE!		10	
1P070029	CALL OUT-✧XX UNITS!	1 1.4	10	100
1P070030	CALL OUT -✧TRANSPON-	1 .7	10	100
	DER!		10	
1P070031	CALL OUT -✧AGCS!	1 1.1	10	100
1P070032	CALL OUT -✧ATT CWS!	1 1.1	10	100
1P070033	CALL- GEAR UP, LOCKED	1 1.1	10	100
1P070034	CALL- V2 PLUS 15	1 1.1	10	100
1P090001	MON RADIO COMM -	1 4.5	10	100
	✧NASA 515, CONTACT		10	
	ATLANTA DEPARTURE ON		10	
	ONE TWO FIVE POINT		10	
1P090002	RADIO COMM -✧NASA	1 1.7	10	100
	515, ROGER!		10	
1P090003	RADIO COMM -✧ATLANTA	1 3.5	10	100
	DEPARTURE CONTROL,		10	
	THIS IS NASA 515,		10	
	OVER!		10	
1P090005	MON RADIO COMM-	1 3.5	10	100
	✧NASA 515, ATLANTA		10	
	DEPARTURE, ROGER.		10	

	SQUAWK IDENT!			10
1P090006	MON RADIO COMM -	1	3.2	10 100
	✧NASA 515, RADAR			10
	CONTACT, SAY ALTI-			10
	TUDE, OVER!			10
1P090007	RADIO COMM -✧NASA	1	2.3	10 100
	515, LEAVING ONE			10
	EIGHT HUNDRED!			10
1P090008	MON RADIO COMM-	1	3.1	10 100
	(NASA 515, CLIMB AND			10
	MAINTAIN FLIGHT LVL			10
	230. CONTACT ATLANTA			10
1P090009	CENTER ON ONE TWO	1	3.1	10 100
	THREE POINT NINER			10
	FIVE, OVER!			10
1P090010	RADIO COMM -✧515,	1	3.5	10 100
	ROGER. CLIMB AND			10
	MAINTAIN FLIGHT			10
	LEVEL TWO THREE ZERO			10
1P090011	, CONTACT CENTER ON	1	3.5	10 100
	ONE TWO THREE POINT			10
	NINER FIVE, GOOD			10
	DAY!			10
1P090012	RADIO COMM -	1	.45	10 100
	✧ATLANTA CENTER,			10
	THIS IS NASA 515 OUT			10
	OF 11000 FOR FL230,			10
1P090013	OVER!	1	.5	10 100
1P090014	MON RADIO COMM -	1	3.5	10 100
	✧NASA 515, THIS IS			10
	ATLANTA CENTER,			10
	ROGER. SQUAWK IDENT!			10
1P090015	MON RADIO COMM -	1	3.5	10 100
	✧NASA 515, RADAR			10
	CONTACT. REPORT			10
	LEAVING FL210, OVER!			10
1P090016	RADIO COMM - ✧NASA	1	3.5	10 100
	515, RAGER. REPORT			10
	FLIGHT LEVEL TWO ONE			10
	ZERO!			10
1P090017	CALL OUT- ✧AFTER	1	1.2	10 100
	TAKEOFF CHECKLIST!			10
1P090018	CALL OUT- ✧START	1	0.9	10 100
	SWITCHES!			10
1P090019	CALL OUT- -✧OFF!	1	0.5	10 100
1P090020	CALL OUT -✧LANDING	1	0.9	10 100
	GEAR!			10
1P090021	CALL OUT-✧UP AND	1	1	10 100
	OFF!			10
1P090022	CALL OUT -✧FLAPS!	1	0.6	10 100
1P090023	CALL OUT -✧AFTER	1	1.9	10 100
	TAKEOFF CHECKLIST			10
	COMPLETE!			10
1P090024	SEVEN, GOOD-DAY SIR!	1	1.5	10 100
1P090025	MON RADIO COMM -	1	3.0	10 100
	✧NASA 515, FOR VEC-			10
	TOR TO INTERCEPT JAY			10
	THIRTY SEVEN, TURN			10
1P090026	LEFT HEADING ZERO	1	4.0	10 100
	SEVEN ZERO, CLIMB			10

	AND MAINTAIN NINER			10
	THOUSAND, OVER!			10
1P090027	RADIO COMM - NASA	1	4.0	10 100
	515, ROGER. LEFT			10
	HEADING ZERO SEVEN			10
	ZERO, MAINTAIN NINER			10
1P090028	THOUSAND.!	1	.5	10 100
1P090029	MON RADIO COMM -	1	3.5	10 100
	NASA 515, CLIMB AND			10
	MAINTAIN ONE TWO			10
	THOUSAND, OVER!			10
1P090030	RADIO COMM - NASA	1	2.8	10 100
	515, ROGER. MAINTAIN			10
	ONE TWO THOUSAND!			10
1P090031	MON RADIO COMM -	1	3.75	10 100
	NASA 515, MAINTAIN			10
	FLIGHT LEVEL ONE			10
	EIGHT ZERO. TRAFFIC			10
1P090032	TWELVE OACLOCK, FOUR	1	5.00	10 100
	MILES, NORTHEAST			10
	BOUND, C-130 ASSIGND			10
	FLIGHT LEVEL ONE			10
1P090033	NINER ZERO, OVER!	1	1.25	10 100
1P090034	RADIO COMM - NASA	1	4.0	10 100
	515, ROGER. MAINTAIN			10
	NASA 515, CLIMB AND			10
	FLIGHT LEVEL ONE			10
	EIGHT ZERO. WE HAVE			10
1P090035	TRAFFIC IN SIGHT!	1	1.0	10 100
1P090036	MON RADIO COMM -	1	3.0	10 100
	NASA 515, CLEAR OF			10
	TRAFFIC, CLIMB AND			10
	MAINTAIN FLIGHT			10
1P090037	LEVEL TWO THREE ZERO	1	4.0	10 100
	. REPORT LEAVING			10
	FLIGHT LEVEL TWO ONE			10
	ZERO, OVER!			10
1P090038	RADIO COMM - NASA	1	3.5	10 100
	515, ROGER. MAINTAIN			10
	TWO THREE ZERO.			10
	REPORT LEAVING TWO			10
1P090039	ONE ZERO.!	1	.5	10 100
1P090040	RADIO COMM - ATLANTA	1	4.0	10 100
	CENTER, NASA 515.			10
	LEAVING FLIGHT LEVEL			10
	TWO ONE ZERO, OVER!			10
1P090041	MON RADIO COMM -	1	3.5	10 100
	NASA 515, ROGER.			10
	CLIMB AND MAINTAIN			10
	FLIGHT LEVEL THREE			10
1P090042	ONE ZERO. CONTACT	1	3.5	10 100
	CENTER ON ONE THREE			10
	THREE POINT SEVEN,			10
	OVER!			10
1P090043	RADIO COMM - NASA	1	3.7	10 100
	515, ROGER. MAINTAIN			10
	FLIGHT LEVEL THREE			10
	ONE ZERO, CENTER ON			10
1P090044	ONE THREE THREE	1	2.3	10 100
	POINT SEVEN.!			10

1P090045	RADIO COMM -ATLANTA	1	3.7	10	100
	CENTER, THIS IS NASA			10	
	515 OUT OF FLIGHT			10	
	LEVEL TWO THREE ZERO			10	
1P090046	FOR TWO NINER ZERO,	1	2.3	10	100
	OVER!			10	
1P090047	MON RADIO COMM -	1	3.7	10	100
	ATLANTA NASA 515,			10	
	CENTER, ROGER.			10	
	SQUAWK IDENT. REPORT			10	
1P090048	LEAVING FLIGHT LEVEL	1	3.3	10	100
	TWO EIGHT ZERO,			10	
	OVER!			10	
1P090049	RADIO COMM -NASA	1	4.0	10	100
	515, ROGER. REPORT			10	
	FLIGHT LEVEL TWO			10	
	EIGHT ZERO.!			10	
1P090050	RADIO COMM -ATLANTA	1	4.0	10	100
	CENTER, NASA 515			10	
	LEAVING FLIGHT LEVEL			10	
	TWO EIGHT ZERO,OVER!			10	
1P090051	MON RADIO COMM-	1	3.5	10	100
	ATLANTA NASA 515,			10	
	ROGER.			10	
	CLIMB AND MAINTAIN			10	
	FLIGHT LEVEL TWO			10	
1P090052	NINER ZERO, OVER!	1	1.5	10	100
1P090053	RADIO COMM -NASA	1	4.0	10	100
	515, ROGER. MAINTAIN			10	
	FLIGHT LEVEL TWO			10	
	NINER ZERO.!			10	
1P090054	MON RADIO COMM -	1	3.5	10	100
	ATLANTA NASA 515,			10	
	CLIMB AND			10	
	MAINTAIN FLIGHT LVL			10	
	THREE THREE ZERO.			10	
1P090055	CONTACT CENTER ON	1	3.5	10	100
	ONE THREE FOUR POINT			10	
	FIVE FIVE, OVER!			10	
1P090056	RADIO COMM -NASA	1	4.0	10	100
	515, ROGER. MAINTAIN			10	
	FLIGHT LEVEL THREE			10	
	THREE ZERO, CENTER			10	
1P090057	ON ONE THREE FOUR	1	2.0	10	100
	POINT FIVE FIVE.!			10	
1P090058	RADIO COMM -ATLANTA	1	4.0	10	100
	CENTER, NASA 515			10	
	LEAVING FLIGHT LEVEL			10	
	TWO NINER ZERO FOR			10	
1P090059	FLIGHT LEVEL THREE	1	2.0	10	100
	THREE ZERO, OVER!			10	
1P090060	MON RADIO COMM -	1	3.5	10	100
	ATLANTA NASA 515,			10	
	CENTER, ROGER.			10	
	SQUAWK IDENT			10	
1P090061	MON RADIO COMM -	1	3.5	10	100
	ATLANTA NASA 515,			10	
	RADAR			10	
	CONTACT. REPORT			10	
	LEVEL AT FLIGHT			10	
1P090062	LEVEL THREE THREE	1	2.0	10	100
	ZERO, OVER!			10	
1P090063	CALL OUT-FLAPS 1!	1	.8	10	100

1P090064	CALL OUT -FLAPS	1	.8	10	100	
	ZERO!			10		
1P090065	CALL OUT -	1	2.5	10	100	
	SPARTAMBURG VOR ON			10		
	NAV 2!			10		
1P090066	CALL OUT -	1	2.5	10	100	
	GORDONSVILL VOR ON			10		
	NAV 1!			10		
1P090067	CALL OUT - ONE	1	1.7	10	100	
	THOUSAND FEET TO			10		
	LEVEL OF!			10		
1P090068	RADIO COMM - ATLANTA	1	3.1	10	100	
	DEPARTURE, THIS			10		
	IS NASA 515, OVER!			10		1P0
1P090069	MON RADIO COMM -	1	4	10	100	
	NASA 515, CONTACT			10		
	ATLANTA CENTER ON			10		
	ONE TWO THREE POINT			10		
1P090070	NINER FIVE, OVER!	1	1.5	10	100	
1P090073	RADIO COMM - NASA	1	3.7	10	100	
	515, ROGER. ONE TWO			10		
	THREE POINT NINER			10		
	FIVE.!			10		
1P090074	MON RADIO COMM -	1	4	10	100	
	NASA 515, ROGER.			10		
	CONTACT CENTER ON			10		
	ONE THREE THREE			10		
1P090075	POINT SEVEN, OVER!	1	1	10	100	
1P090076	RADIO COMM - 515,	1	3.1	10		100
	ROGER. ONE THREE			10		
	THREE POINT SEVEN.!			10		
1P090077	RADIO COMM - ATLANTA	1	3.4	10	100	
	CENTER, THIS IS NASA			10		
	515 LEAVING FLIGHT			10		
	LEVEL TWO ONE ZERO			10		
1P090078	FOR FLIGHT LEVEL	1	3.4	10	100	
	THREE THREE ZERO,			10		
	OVER.!			10		
1P090079	MON RADIO COMM -	1	3	10	100	
	NASA 515, MAINTAIN			10		
	FLIGHT LEVEL TWO SIX			10		
	ZERO. TRAFFIC AT			10		
1P090080	TWELVE O'CLOCK FOUR	1	4.2	10	100	
	MILES, NORTHEAST			10		
	BOUND, C-130 ASSIGN-			10		
	ED FLIGHT LEVEL TWO			10		
1P090081	SEVEN ZERO, OVER!	1	2	10	100	
1P090082	RADIO COMM - 515,	1	3.3	10		100
	ROGER. MAINTAIN			10		
	FLIGHT LEVEL TWO SIX			10		
	ZERO. WE HAVE TRAF-			10		
1P090083	FIC IN SIGHT.!	1	1.1	10	100	
1P090084	MON RADIO COMM -	1	3.1	10	100	
	NASA 515, CLEAR OF			10		
	TRAFFIC. CLIMB AND			10		
	MAINTAIN FLIGHT LEV-			10		
1P090085	EL THREE THREE ZERO.	1	3.1	10	100	
	REPORT LEAVING TWO			10		
	EIGHT ZERO, OVER.!			10		
1P090086	RADIO COMM - 515,	1	3	10	100	

	ROGER. MAINTAIN			10
	THREE THREE ZERO,			10
	REPORT LEAVING TWO			10
1P090087	EIGHT ZERO.!	1	1	10
1P090088	MON RADIO COMM -	1	3	10 100
	4NASA 515, CLIMB AND			10
	MAINTAIN FLIGHT LEV-			10
	EL THREE ONE ZERO,			10
1P090089	OVER.!	1	.5	10 100
1P090090	RADIO COMM - 4515,	1	3	10 100
	ROGER. MAINTAIN			10
	FLIGHT LEVEL THREE			10
	ONE ZERO.!			10
1P090091	RADIO COMM -4ATLANTA	1	3	10 100
	CENTER, NASA 515			10
	LEAVING FLIGHT LEV-			10
	EL THREE ONE ZERO			10
1P090092	FOR FLIGHT LEVEL	1	3	10 100
	THREE THREE ZERO,			10
	OVER.!			10
1P090093	RADIO COMM -4ATLANTA	1	4	10 100
	CENTER, THIS IS NASA			10
	515 OUT OF ELEVEN			10
	THOUSAND FOR FLIGHT			10
1P090094	LEVEL THREE THREE	1	1.5	10 100
	ZERO, OVER.!			10
1P090095	CALL OUT -4ALTIMETER	1	3	10 100
	BARO SETTING IS TWO			10
	NINE POINT NINE TWO!			10
1P090096	CALL OUT- 4SPARTAN-	1	2	10 100
	BUR VOR IS ON NAV 1!			10
1PB9EA01	CALL OUT-(INITATE	1	1.5	10 100
	FIRE CONTROL PROC.)			10
1PB9EA02	CALL OUT(MONITORING	1	2.00	10 100
	NO.1 FIRE WARNING			10
	LIGHT)			10
1PB9EA04	CALL OUT	1	1.3	10 100
	(THRUST LEVER TO			10
	IDLE)			10
1PB9EA06	CALL OUT (NO.1 START	1	1.4	10 100
	LEVER TO CUT OFF)			10
1PB9EA08	CALL OUT (FIRE	1	1.3	10 100
	WARNING SWITCH PULL)			10
1PB9EA10	CALL OUT (FIRE	1	3.0	10 100
	WARNING STILL ON,			10
	HANDLE ROTATION NOW)			10
1PB9EA11	CALL OUT (LEFT	1	1.5	10 100
	BOTTLE DISCHARGING)			10
1PB9EA12	CALL OUT (FIRE	1	.5	10 100
	EXTINGUISHED)			10
1PB9EA13	RADIO COMM (ALT DEP	1	6.8	10 100
	CONTROL-NASA 515-			10
	ENGINE FIRE-EXT.-			10
	REQ.EMERG.APP.)			10
1PB9EA14	RADIO COMM(NASA-515	1	3.8	10 100
	UNDERSTAND ENG.FIRE			10
	OUT-EMERG.APP REQ-			10
	TURN LEFT 360 DEGREE			10
1PB9EA27	MAINTAIN SPEED AND	1	3.0	10 100
	ALTITUDE SQUWNK 7700			10

	+ IDENT)				10
1PB9EA15	RADIO COMM(ALT.D.C.-	1	11.		10
	515 TURN LEFT 360DEG				100
	MAINTAIN A/S+HDG				10
	SQ.7700+IDENT)				10
1PB9EA16	CALL OUT(MASTER	1	1.5	20	10
	FIRE WARNING OFF)				100
1PB9EA17	CALL OUT(ENG.NO.1	1	1.5	20	10
	THRUST LEVER TO				100
	IDLE)				10
1PB9EA18	CALL OUT(ENG.NO.1	1	1.5	20	10
	START LEVER OFF)				100
1PB9EA19	CALL OUT(ENG.FIRE	1	1.5	20	10
	WARNING SW PULLED)				100
1PB9EA20	CALL OUT(ISOLATION	1	1.5	20	10
	VALVE SW. CLOSED)				100
1PB9EA21	CALL OUT(APU BLEED	1	1.5	20	10
	VALVE OFF)				100
1PB9EA22	CALL OUT(APU START)	1	1.5		10
1PB9EA23	CALL OUT(FUEL,ELEC.,	1	3.5	20	100
	AND WING ANTI-ICE				100
	ADJUSTED)				10
1PB9EA24	CALL OUT(NO.1 AFT	1	4.2		10
	+FWD FUEL AND GEN.				100
	SW. OFF)				10
1PB9EA25	CALL OUT(WING	1	1.5		10
	ANTI-ICE ADJUSTED)				100
1PB9EA26	CALL OUT(MASTER	1	1.5		10
	CAUTION LIGHT OFF)				100
1P09FE01	CALL OUT-φSYS B PUMP	1	2.7		10
	NO. 1 OVERHEATED!				100
1P09FE02	CALL OUT-φPUMP	1	1.5		10
	SWITCH OFF!				100
1P09FE03	CALL OUT-φCHECKLIST	1	1.6		10
	COMPLETE!				100
1P11FD01	CALL OUT-φSYSTEM B	1	2		10
	LOW PRESSURE!				100
1P11FD02	CALL OUT-φSYSTEM B	1	3.7		10
	FLT CONTROL SW-STBY				100
	RUDDER!				10
1P11FD03	CALL OUT-φSYSTEM B	1	3		10
	HYD PUMPS-OFF!				100
1P11FD04	CALL OUT-φAUTOPILOT	1	4.2		10
	HYD SYS SELECTOR-				100
	SYS A!				10
1P11AF01	CALL OUT-φNO 2 OIL	1	3.2		10
	FILTER BYPASS!				100
1P11AF02	CALL OUT-φLITE OUT	1	3.5		10
	AT XXX EPR!				100
1P11CB01	CALL OUT-φELECTRICAL	1	2.1		10
	FAILURE!				100
1P11CB02	CALL OUT-φNO 2 CSD	1	4		10
	LOW OIL PRESSURE!				100
1P11CB03	CALL OUT-φAPU ON NO. 1	1	3.7		10
	2 BUS!				100
1P11CB04	CALL OUT-φGEN DRIVE	1	3.7		10
	DISCONNECT SWITCH-				100
	DISCONNECT!				10
1P11CB05	CALL OUT-φAPU-START, 1	1	4		10
	ON BUS!				100

1P110001	RADIO COMM - ATLANTA	1	4.0	10	100
	CENTER, THIS IS NASA			10	
	515 LEVEL AT FLIGHT			10	
	LEVEL THREE THREE			10	
1P110002	ZERO, OVER!	1	.2	10	100
1P110003	MON RADIO COMM -	1	1.7	10	100
	NASA 515, ROGER!			10	
1P110004	RADIO COMM - ATLANTA	1	4.0	10	100
	CENTER, THIS IS NASA			10	
	515. REQUEST VECTORS			10	
	FOR RETURN TO			10	
1P110005	ATLANTA, OVER!	1	1.0	10	100
1P110006	MON RADIO COMM -	1	3.0	10	100
	NASA 515, ROGER.			10	
	STANDBY FOR INSTRUCTIONS!			10	
1P110007	MON RADIO COMM -	1	3.66	10	100
	NASA 515, FOR VECTOR TO INTERCEPT			10	
	LANIER SIX ARRIVAL,			10	
1P110008	PULASKI TRANSITION,	1	4.88	10	100
	TURN LGFT HEADING			10	
	TWO SEVEN ZERO. CONTACT ATLANTA CENTER			10	
1P110009	ON ONE THREE FIVE	1	2.44	10	100
	POINT THREE FIVE, OVER!			10	
1P110010	RADIO COMM - 515 ,	1	4.0	10	100
	ROGER. LEFT HEADING			10	
	TWO SEVEN ZERO,			10	
	LANIER SIX ARRIVAL,			10	
1P110011	CENTER ONE THREE	1	3.0	10	100
	FIVE POINT THREE			10	
	FIVE.!			10	
1P110012	RADIO COMM - ATLANTA	1	3.5	10	100
	CENTER, THIS IS NASA			10	
	515 LEVEL AT THREE			10	
	THREE ZERO TURNING			10	
1P110013	TO TWO SEVEN ZERO,	1	1.5	10	100
	OVER!			10	
1P110014	MON RADIO COMM -	1	2.5	10	100
	NASA 515, ROGER.			10	
	SQUAWK IDENT!			10	
1P110015	MON RADIO COMM-	1	2.0	10	100
	NASA 515, RADAR			10	
	CONTACT!			10	
1P110016	MON RADIO COMM -	1	3.5	10	100
	NASA 515, DESCEND			10	
	AND MAINTAIN FLIGHT			10	
	LEVEL THREE ONE ZERO			10	
1P110017	. CONTACT CENTER ON	1	3.5	10	100
	ONE THREE TWO POINT			10	
	SEVEN FIVE, OVER!			10	
1P110018	RADIO COMM - NASA	1	4.0	10	100
	515, ROGER. MAINTAIN			10	
	FLIGHT LEVEL THREE			10	
	ONE ZERO, CENTER			10	
1P110019	ONE THREE TWO POINT	1	2.0	10	100
	SEVEN FIVE.			10	
1P110020	CALL OUT - PULASKI	1	2.5	10	100

	VOR ON NAV 1!			10
1P130001	MON RADIO COMM -	1	3.7	10 100
	4NASA 515, FOR VEC-			10
	TORS TO INTERCEPT			10
	JAY EIGHT FIFTEEN R,			10
1P130002	TURN LEFT HEADING	1	2.5	10 100
	TWO SEVEN ZERO, OVER			10
1P130003	RADIO COMM - 4515,	1	2.7	10 100
	ROGER. LEFT HEADING			10
	TWO SEVEN ZERO!			10
1P130004	MON RADIO COMM -	1	4.5	10 100
	4NASA 515, YOU ARE			10
	CLEARED TO THE AT-			10
	LANTA INTERNATIONAL			10
1P130005	AIRPORT VIA JAY	1	4.5	10 100
	EIGHT FIFTEEN R AND			10
	SHINE OH ONE STAR.			10
	PTA AT LAKESIDE IS			10
1P130006	TEN TWENTY ONE OH	1	.5	10 100
	OH, OVER!			10
1P130007	MON RADIO COMM -	1	4	10 100
	4NASA 515, CONTACT			10
	CENTER ON ONE THREE			10
	FIVE POINT THREE			10
1P130008	FIVE, OVER!	1	.3	10 100
1P130009	RADIO COMM - 4515,	1	3.1	10 100
	ROGER. ONE THREE			10
	FIVE POINT THREE			10
	FIVE!			10 1P1
1P130010	RADIO COMM - 4515,	1	4	10 100
	ROGER. CLEARED TO			10
	ATLANTA VIA SHINE OH			10
	ONE. PTA LAKESIDE			10
1P130011	TEN TWENTY ONE OH	1	3.5	10 100
	OH.!			10
1P140001	RADIO COMM -4ATLANTA	1	4.0	10 100
	CENTER, THIS IS NASA			10
	515 LEAVING FLIGHT			10
	LEVEL THREE THREE			10
1P140002	ZERO FOR FLIGHT LVL	1	2.0	10 100
	THREE ONE ZERO, OVER			10
1P140003	MON RADIO COMM -	1	3.0	10 100
	4NASA 515, ATLANTA			10
	CENTER, ROGER.			10
	SQUAWK IDENT!			10
1P140004	MON RADIO COMM -	1	2.0	10 100
	4NASA 515, RADAR			10
	CONTACT!			10
1P140005	MON RADIO COMM -	1	3.27	10 100
	4NASA 515, FOR VEC-			10
	TOR TO INTERCEPT			10
	PULASKI TWO TWO FIVE			10
1P140006	RADIAL, TURN LEFT	1	4.36	10 100
	HEADING TWO FOUR			10
	ZERO, CLEARED TO THE			10
	ATLANTA INTERNA-			10
1P140007	TIONAL AIRPORT VIA	1	4.36	10 100
	THE LANIER SIX AR-			10
	RIVAL, PULASKI TRAN-			10
	SITION, OVER!			10

1P140008	RADIO COMM - 5 515, ROGER. LEFT HEADING TWO FOUR ZERO FOR PULASKI TWO TWO FIVE	1	4.0	10 10 10 10	100
1P140009	RADIAL, LANIER SIX ARRIVAL.!	1	2.0	10 10 10	100
1P140010	MON RADIO COMM - 4 NASA 515, CONTACT CENTER ON ONE THREE TWO POINT EIGHT,OVER	1	3.5	10 10 10 10	100
1P140011	RADIO COMM - 4 NASA 515, ROGER. ONE THREE TWO POINT EIGHT.!	1	3.5	10 10 10 10	100
1P140012	RADIO COMM - 4 ATLANTA CENTER, NASA 515 LEVEL AT FLIGHT LVL THREE ONE ZERO,OVER!	1	4.0	10 10 10 10	100
1P140013	MON RADIO COMM - 4 NASA 515, ATLANTA CENTER, ROGER. SQUAWK IDENT!	1	3.0	10 10 10 10	100
1P140014	MON RADIO COMM- 4 NASA 515, RADAR CONTACT!	1	2.0	10 10 10	100
1P140015	MON RADIO COMM - 4 NASA 515, DESCEND AND MAINTAIN FLIGHT LEVEL TWO FOUR ZERO.	1	3.9	10 10 10 10	100
1P140016	REPORT LEAVING FLT LEVEL TWO SIX ZERO, OVER!	1	2.6	10 10 10	100
1P140017	RADIO COMM - 4 515, ROGER. MAINTAIN FLT LEVEL TWO FOUR ZERO. REPORT FLIGHT LEVEL	1	4.0	10 10 10 10	100
1P140018	TWO SIX ZERO!	1	1.0	10	100
1P140019	RADIO COMM - 4 ATLANTA CENTER, NASA 515 LEAVING FLIGHT LEVEL TWO SIX ZERO, OVER!	1	4.0	10 10 10 10	100
1P140020	MON RADIO COMM - 4 NASA 515, DESCEND AND MAINTAIN ONE ONE THOUSAND. CONTACT	1	3.75	10 10 10 10	100
1P140021	CENTER ON ONE TWO FIVE POINT TWO,OVER!	1	2.50	10 10	100
1P140022	RADIO COMM - 4 NASA 515, ROGER. MAINTAIN ONE ONE THOUSAND, CENTER ONE TWO FIVE	1	4.0	10 10 10 10	100
1P140023	POINT TWO.!	1	1.0	10	100
1P140024	RADIO COMM - 4 ATLANTA CENTER, THIS IS NASA 515 LEAVING FLIGHT LEVEL TWO FIVE ZERO	1	4.0	10 10 10 10	100
1P140025	FOR ONE ONE THOU- SAND, OVER!	1	2.0	10 10	100
1P140026	MON RADIO COMM - 4 NASA 515, ATLANTA	1	3.5	10 10	100

	CENTER, ROGER.			10
	SQUAWK IDENT. ALTI-			10
1P140027	METER TWO NINER	1	2.5	10 100
	POINT EIGHT EIGHT!			10
1P140028	MON RADIO COMM -	1	4.0	10 100
	ΦNASA 515, MAINTAIN			10
	ONE FIVE THOUSAND.			10
	CLEARANCE LIMIT IS			10
1P140029	NOW LANIER INTERSEC-	1	5.33	10 100
	TION. HOLD NORTHWEST			10
	OF FIX ON NORCROSS			10
	ZERO FOUR ONE RADIAL			10
1P140030	ONE AND ONE-HALF	1	5.33	10 100
	MINUTE RIGHT TURNS.			10
	EXPECT FURTHER			10
	CLEARANCE AT ONE			10
1P140031	SEVEN ONE FIVE, OVER!	1	1.33	10 100
1P140032	RADIO COMM -Φ515,	1	4.5	10 100
	ROGER. MAINTAIN ONE			10
	FIVE THOUSAND. HOLD			10
	NORTHWEST OF LANIER			10
1P140033	INTERSECTION, RIGHT	1	1.5	10 100
	TURNS.!			10
1P140034	MON RADIO COMM -	1	3.27	10 100
	ΦNASA 515, CLEARED			10
	TO ATLANTA INTER-			10
	NATIONAL AIRPORT VIA			10
1P140035	LAST ROUTING CLEARED	1	4.36	10 100
	. INCREASE SPEED TO			10
	TWO THREE ZERO KNOTS			10
	. DESCEND AND MAIN-			10
1P140036	TAIN ONE ONE THOU-	1	4.36	10 100
	SAND. EXPECT AN ILS			10
	RUNWAY ZERO EIGHT			10
	APPROACH, OVER!			10
1P140037	RADIO COMM -Φ515,	1	4.5	10 100
	ROGER. INCREASE SPD			10
	TWO THREE ZERO.			10
	MAINTAIN ONE ONE			10
1P140038	THOUSAND!	1	.5	10 100
1P140039	MON RADIO COMM -	1	4.0	10 100
	ΦNASA 515, CONTACT			10
	APPROACH CONTROL ON			10
	ONE TWO SIX POINT			10
1P140040	NINER, OVER!	1	1.0	10 100
1P140041	RADIO COMM -ΦNASA	1	4.0	10 100
	515, ROGER. APPROACH			10
	ON ONE TWO SIX POINT			10
	NINER!			10
1P140042	CALL OUT -ΦTOCCOA	1	2.3	10 100
	VOR ON NAV 2 !			10
1P140043	CALL OUT -ΦALTIMETER	1	2.4	10 100
	SETTING IS TWO NINER			10
	POINT EIGHT!			10
1P140044	CALL OUT -ΦNORCROSS	1	2.3	10 100
	VOR ON NAV 1 !			10
1P140045	CALL OUT -Φ1000 FEET	1	1.7	10 100
	TO LEVEL OFF!			10
1P140046	CALL OUT -ΦCHATA-	1	2.3	10 100
	NOOGA VOR ON NAV 2!			10

1P140047	CALL OUT -THIRTY	1	.8	10	100
	SECONDS!			10	
1P140048	CALL OUT -SIXTY	1	.8	10	100
	SECONDS!			10	
1P140049	CALL OUT -EIGHTY	1	.8	10	100
	FIVE SECONDS!			10	
1P150001	MON RADIO COMM -	1	4	10	100
	NASA 515, REPORT			10	
	LEAVING FLIGHT LEVEL			10	
	TWO SIX ZERO. ALTI-			10	
1P150002	METER TWO NINER	1	2	10	100
	EIGHT EIGHT, OVER!			10	
1P150003	RADIO COMM - 515	1	3	10	100
	ROGER. REPORT FLIGHT			10	
	LEVEL TWO SIX ZERO.!			10	
1P150005	MON RADIO COMM -	1	3	10	100
	NASA 515, ROGER.			10	
	CONTACT CENTER ON			10	
	ONE TWO FIVE POINT			10	
1P150006	TWO, OVER.!	1	1.5	10	100
1P150007	RADIO COMM - 515,	1	3.3	10	100
	ROGER. CENTER ONE			10	
	TWO FIVE POINT TWO.!			10	
1P150008	MON RADIO COMM -	1	3.7	10	100
	NASA 515, ATLANTA			10	
	CENTER, ROGER.			10	
	SQUAWK IDENT!			10	
1P150009	MON RADIO COMM -	1	4	10	100
	NASA 515, DUE TO			10	
	TRAFFIC YOUR PLANNED			10	
	TIME OF ARRIVAL AT			10	
1P150010	LAKESIDE IS NOW	1	4	10	100
	10:22:15, OVER!			10	
1P150011	RADIO COMM - 515,	1	4.5	10	100
	ROGER, TIME OF AR-			10	
	RIVAL NOW 10:22:15!			10	
1P150012	CALL OUT -FLIGHT	1	2	10	100
	PLAN UPDATED WITH			10	
	NEW ALTITUDE!			10	
1P150013	CALL OUT -ALTIMETER	1	2.7	10	100
	BARD SETTING IS TWO			10	
	NINER EIGHT EIGHT			10	
1P150014	CALL OUT -FLIGHT	1	3	10	100
	PLAN UPDATED WITH			10	
	NEW PTA AT LAKESIDE!			10	
1P160001	MON RADIO COMM -	1	3.42	10	100
	INFORMATION LIMA:			10	
	ONE SEVEN ZERO FIVE			10	
	OBSERVATION- TWO			10	
1P160002	FIVE HUNDRED SCAT-	1	4.56	10	100
	TERED CEILING FOUR			10	
	THOUSAND BROKEN.			10	
	VISIBILITY ONE SIX.			10	
1P160003	TEMPERATURE FIVE	1	4.56	10	100
	NINER. WIND ONE ONE			10	
	ZERO DEGREES AT TEN			10	
	GUSTING TO ONE SEVEN			10	
1P160004	. ALTIMETER TWO -	1	4.56	10	100
	NINER EIGHT FOUR.			10	
	SIMULTANEOUS PARAL-			10	

1P160005	LEL APPROACHES IN OPERATION ON RUNWAYS	1	4.56	10	
	ZERO EIGHT AND NINER			10	100
	RIGHT. ADVISE CON-			10	
	TROLLER ON INITIAL			10	
1P160006	CONTACT YOU HAVE IN-	1	2.28	10	100
	FORMATION LIMA.!			10	
1P160007	RADIO COMM - ATLANTA	1	4.0	10	100
	APPROACH CONTROL,			10	
	THIS IS NASA 515			10	
	LEVEL AT ONE ONE			10	
1P160008	THOUSAND WITH INFOR-	1	2.0	10	100
	NATION LIMA, OVER!			10	
1P160009	MON RADIO COMM -	1	2.5	10	100
	NASA 515, ROGER.			10	
	SQUAWK IDENT.!			10	
1P160010	MON RADIO COMM -	1	4	10	100
	NASA 515, TURN LEFT			10	
	HEADING TWO ONE ZERO			10	
	REDUCE SPEED TO TWO			10	
1P160011	ZERO ZERO, OVER!	1	2	10	100
1P160012	RADIO COMM - 515 ,		5	10	100
	ROGER. LEFT HEADING			10	
	TWO ONE ZERO, SLOW			10	
	TO TWO ZERO ZERO!			10	
1P160013				10	
1P160014	MON RADIO COMM -	1	4.0	10	100
	NASA 515, REDUCE			10	
	SPEED TO ONE NINER			10	
	ZERO KNOTS, OVER!			10	
1P160015	RADIO COMM - 515 ,	1	2.5	10	100
	ROGER. ONE IONER			10	
	ZERO KNOTS!			10	
1P160016	MON RADIO COMM -	1	4.0	10	100
	NASA 515, CONTACT			10	
	APPROACH CONTROL ON			10	
	ONE TWO SEVEN POINT			10	
1P160017	TWO FIVE, OVER!	1	1.0	10	100
1P160018	RADIO COMM- 515 ,	1	3.0	10	100
	ROGER. ONE TWO SEVEN			10	
	POINT TWO FIVE!			10	
1P160019	RADIO COMM - ATLANTA	1	3.5	10	100
	APPROACH CONTROL,			10	
	THIS IS NASA 515			10	
	LEVEL AT ONE ONE			10	
1P160020	THOUSAND, OVER!	1	.75	10	100
1P160021	MON RADIO COMM -	1	3.5	10	100
	NASA 515, ATLANTA			10	
	APPROACH. ROGER.			10	
	SQUAWK IDENT!			10	
1P160022	MON RADIO COMM -	1	3.0	10	100
	NASA 515, TURN RT			10	
	HEADING TWO SEVEN			10	
	ZERO. REDUCE SPEED			10	
1P160023	TO ONE SEVEN ZERO	1	4.0	10	100
	KNOTS. DESCEND AND			10	
	MAINTAIN FOUR FIVE			10	
	HUNDRED, OVER!			10	
1P160024	RADIO COMM - 515 ,	1	4.0	10	100
	ROGER. LEFT HEADING			10	

	TWO SEVEN ZERO. SLOW			10
	TO ONE SEVEN ZERO.			10
1P160025	MAINTAIN FOUR FIVE	1	2.0	10 100
	HUNDRED.!			10
1P160026	MON RADIO COMM -	1	3.5	10 100
	4NASA 515, TURN LEFT			10
	HEADING ONE EIGHT			10
	ZERO, OVER!			10
1P160027	RADIO COMM -4515	1	3.0	10 100
	ROGER. LEFT HEADING			10
	ONE EIGHT ZERO.!			10
1P160028	MON RADIO COMM -	1	3.21	10 100
	4NASA 515, YOU ARE			10
	FOURTEEN MILES FROM			10
	THE OUTER MARKER.			10
1P160029	TURN LEFT HEADING	1	4.28	10 100
	ONE TWO ZERO FOR			10
	VECTOR TO INTERCEPT			10
	FINAL APPROACH			10
1P160030	COURSE. YOU ARE	1	4.28	10 100
	CLEARED FOR AN ILS			10
	RUNWAY ZERO EIGHT			10
	APPROACH. CONTACT			10
1P160031	TOWER AT THE OUTER	1	3.21	10 100
	MARKER ON ONE ONE			10
	NINER POINT FIVE,			10
	OVER!			10
1P160032	RADIO COMM- 4515,	1	4.0	10 100
	ROGER. LEFT HEADING			10
	ONE TWO ZERO. ILS			10
	RUNWAY ZERO EIGHT			10
1P160033	APPROACH. TOWER AT	1	3.0	10 100
	OUTER MARKER ON ONE			10
	ONE NINER POINT FIVE			10
1P160034	MON RADIO COMM-	1	3.5	10 100
	4NASA 515, REDUCE			10
	SPEED TO ONE FIVE			10
	ZERO KNOTS OVER!			10
1P160035	RADIO COMM -4515,	1	2.5	10 100
	ROGER. ONE FIVE ZERO			10
	KNOTS!			10
1P160036	MON RADIO COMM -	1	3.5	10 100
	4NASA 515, MAINTAIN			10
	CURRENT SPEED UNTIL			10
	CROSSING STUBBS, OVER			10
1P160037	RADIO COMM -	1	1.7	10 100
	4515, ROGER!			10
1P160038	RADIO COMM-4ATLANTA	1	4.0	10 100
	TOWER, THIS IS NASA			10
	515 OVER LAKESIDE			10
	INBOUND FOR RUNWAY			10
1P160039	ZERO EIGHT, OVER!	1	1.0	10 100
1P160040	MON RADIO COMM -	1	4.0	10 100
	4NASA 515, ATLANTA			10
	TOWER, ROGER. CLEAR			10
	TO LAND RUNWAY ZERO			10
1P160041	EIGHT. WIND ONE ONE	1	3.0	10 100
	ZERO DEGREES AT ZERO			10
	NINER.!			10
1P160042	CALL OUT-4ALTIMETER	1	3.5	10 100

	BARO SETTING IS TWO			10	
	NINER POINT EIGHT			10	
	FOUR!			10	
1P160043	CALL OUT- 4 DESCENT	1	2	10	100
	AND APPROACH CHECK-			10	
	LIST!			10	
1P160044	CALL OUT- 4 ANTI-ICE!	1	1	10	100
1P160045	CALL OUT- 4 NOT REQD!	1	.8	10	100
1P160046	CALL OUT - 4 AIR CON-	1	1.8	10	100
	DITIONING AND PRES-			10	
	SURIZATION!			10	
1P160047	CALL OUT 4 SET!	1	.4	10	100
1P160048	CALL OUT- 4 START	1	.9	10	100
	SWITCHES!			10	
1P160049	CALL OUT 4 FLIGHT!	1	.5	10	100
1P160050	CALL OUT- 4 INBOARD	1	1.1	10	100
	LANDING LIGHTS!			10	
1P160051	CALL OUT - 4 ON!	1	.3	10	100
1P160052	CALL OUT - 4 ALTIMETER	1	1.4	10	100
	AND INSTRUMENTS!			10	
1P160053	CALL OUT- 4 SET AND	1	1.3	10	100
	CROSSCHECKED!			10	
1P160054	CALL OUT- 4 EPR AND	1	1.5	10	100
	IAS BUGS!			10	
1P160055	CALL OUT - 4 V-REF IS	1	1.9	10	100
	XXX KNOTS!			10	
1P160056	CALL OUT - 4 BUGS SET	1	1.6	10	100
	AND CROSS-CHECKED!			10	
1P160057	CALL OUT - 4 CHECKLIST	1	1.3	10	100
	COMPLETED!			10	
1P160058	CALL OUT - 4 FLAPS 1!	1	.7	10	100
1P160059	CALL OUT - 4 RUNWAY 08	1	2.9	10	100
	ILS IS ON NAV 1!			10	
1P160060	CALL OUT - 4 REG VOR	1	2	10	100
	IS ON NAV 2!			10	
1P160061	CALL OUT - 4 FLAPS 5!	1	.7	10	100
1P160062	CALL OUT - 4 FLAPS 15!	1	.7	10	100
1P160063	MON RADIO COMM -	1	4	10	100
	4 NASA 515, REDUCE			10	
	SPEED TO ONE SIX			10	
	ZERO KNOTS, OVER!			10	
1P160064	RADIO COMM- 4 515,	1	2.5	10	100
	ROGER. ONE SIX ZERO			10	
	KNOTS!			10	
1P160065	CALL OUT - 4 LAKESIDE	1	1.5	10	100
	ON ADF-1!			10	
1P160066	CALL OUT - 4 LAKESIDE	1	1.5	10	100
	ON ADF-2!			10	
1P160067	CALL OUT - 4 LOCALIZER	1	1.3	10	100
	ALIVE!			10	
1P160068	CALL OUT- 4 I HAVE	1	1.5	10	100
	NAV 2 DATA!			10	
1P160069	CALL OUT - 4 ILS ON	1	1.5	10	100
	NAV 1!			10	
1P160070	CALL OUT - 4 FLAPS 25!	1	.7	10	100
1P160071	CALL OUT - 4 GLIDE	1	1	10	100
	SLOPE ALIVE!			10	
1P160072	CALL OUT - 4 CROSSING	1	1	10	100
	STUBBS!			10	
1P160073	CALL OUT - 4 FLAPS 40!	1	.7	10	100

1P160074	CALL OUT -<RUNWAY IN 1	1	10	100
	SITE!		10	
1P160075	CALL OUT -<GEAR DOWN 1	1.8	10	100
	AND LANDING CHECK-		10	
	LIST!		10	
1P160076	CALL OUT -<RECALL! 1	.6	10	100
1P160077	CALL OUT -<CHECKED! 1	.4	10	100
1P160078	CALL OUT -<SPEED 1	.7	10	100
	BRAKES!		10	
1P160079	CALL OUT -<ARMED - 1	1.3	10	100
	GREEN LIGHT!		10	
1P160080	CALL OUT -<LANDING 1	.7	10	100
	GEAR!		10	
1P160081	CALL OUT -<DOWN, 1	1	10	100
	THREE GREEN!		10	
1P160082	CALL OUT -<FLAPS! 1	.4	10	100
1P160083	CALL OUT -<FORTY, 1	1.1	10	100
	GREEN LIGHT!		10	
1P160084	CALL OUT -<CHECKLIST 1	1.1	10	100
	COMPLETE!		10	
1P160085	CALL OUT -<FIVE HUN- 1	1.6	10	100
	DRED FEET ABOVE RUN-		10	
	WAY!		10	
1P160086	CALL OUT -<DECISION 1	.8	10	100
	HEIGHT!		10	
1P160087	MON RADIO COMM - 1	3.5	10	100
	<NASA 515, EXIT RUN-		10	
	WAY NEXT INTERSEC-		10	
	TION. CONTACT GROUND		10	
1P160088	POINT NINER WHEN 1	2.5	10	100
	CLEAR OF RUNWAY,		10	
	OVER!		10	
1P160089	RADIO COMM -<515, 1	2.5	10	100
	ROGER. POINT NINER		10	
	WHEN CLEAR!		10	
1P160090	RADIO COMM -<ATLANTA 1	3.5	10	100
	GROUND, THIS IS NASA		10	
	515. TAXI TO GATE X,		10	
	OVER!		10	
1P160091	MON RADIO COMM - 1	3.5	10	100
	<NASA 515, ATLANTA		10	
	GROUND, TAXI TO RAMP		10	
	VIA NORTHEAST-SOUTH-		10	
1P160092	WEST TAXIWAY, OVER! 1	1.0	10	100
1P16EK01	RADIO COMM - 1	3	10	100
	<APPROACH CONTORL,		10	
	THIS IS NASA 515.		10	
	THE PILOT IS INCA-		10	
1P16EK02	PACITATED. I WILL 1	4	10	100
	MAKE A NORMAL ILS		10	
	APPROACH AND LAND-		10	
	ING. REQUEST AN AM-		10	
1P16EK03	BULANCE TO STANDBY 1	3	10	100
	AT GATE X, OVER!		10	
1P16EK04	MON RADIO COMM- 1	3	10	100
	<NASA 515, APPROACH		10	
	CONTROL. UNDERSTAND		10	
	THAT YOUR PILOT IS		10	
1P16EK05	INCAPACITATED AND 1	4	10	100
	REQUEST AMBULANCE.		10	

	WILL USE NORMAL ILS			10
	APPROACH AND LAND.			10
1P16EK06	ADVISE IF YOU RE-	1	3	10 100
	QUIRE SPEICAL HAND-			10
	LING.!			10
1P16EK07	PACITATED. I WILL	1	4	10 100
	MAKE A NORMAL MLS			10
	APPROACH AND LAND-			10
	ING. REQUEST AN AM-			10
1P16EK08	INCAPACITATED AND	1	4	10 100
	REQUEST AMUBLANCE.			10
	WILL USE NORMAL MLS			10
	APPROACH AND LAND.			10
1P16FB01	CALL-OUT (RIGHT MAIN	1	3.5	10 100
	GEAR UNSAFE,			10
	RECYCLING NOW)			10
1P16FB02	CALL-OUT (RIGHT MAIN	1	3.2	10 100
	GEAR STILL UNSAFE)			10
1P16FB03	CALL-OUT (GOING	1	3.3	10 100
	AROUND NOW, SET FLAP			10
	15, GEAR UP)			10
1P16FB04	CALL-OUT (FLAPS 15)	1	1.0	10 100
1P16FB05	CALL-OUT (BUG + 15)	1	1.4	10 100
1P16FB06	CALL-OUT (GEAR UP,	1	2	10 100
	OFF)			10
1P16FB07	RADIO-CALL (ATL TWR	1	3.5	10 100
	NASA 515 ON THE GO			10
	WITH GEAR FAILURE)			10
1P16FB08	RADIO-COMM (NASA 515	1	5.4	10 100
	CLIMB STRAIGHT AHEAD			10
	TO 3000 AND 170 SAY			10
	YOUR INTENTIONS)			10
1P16FB09	RADIO-CALL (ATL NASA	1	5.5	10
	515 ROGER 3000 AND			10
	170 REQUEST ILS			10
	RUNWAY 08 WE WILL)			10
1P16FB10	CALL-OUT (SET FLAPS	1	4.5	10 100
	5 REPORT 3000 REPORT			10
	170 KNOTS)			10
1P16FB11	CALL-OUT (FLAPS 5)	1	.8	10 100
1P16FB12	CALL-OUT (3000)	1	.8	10 100
1P16FB13	RADIO-CALL (ATL TWR	1	2.8	10 100
	NASA 515 LEVEL 3000)			10
1P16FB14	RADIO-COMM (NASA 515	1	7.5	10 100
	ROGER TURN LEFT HDG			10
	045 CNCT APPCON 127.			10
	25 FOR RADAR TO ILS)			10
1P16FB15	CALL-OUT (170 KNOTS)	1	1.0	10 100
1P16FB16	RADIO-CALL (ATL NASA	1	5	10 100
	515 LEFT TO 045 APP			10
	CONTROL 127.25)			10
1P16FB17	CALL-OUT (GET GEAR	1	1.5	10 100
	UNSAFE CHECKLIST)			10
1P16FB18	CALL-OUT (GEAR LEVER	1	1	10 100
	OFF)			10
1P16FB19	CALL-OUT (MANUAL	1	1.2	10 100
	EXTENTIONS NOW)			10
1P16FB20	CALL-OUT (DOWN 3	1	1.2	10 100
	GREEN)			10
1P16FB21	TEXTEND(GEAR MANUAL	1	2.8	10 100

	BEFORE FINAL)			10
1P170001	MON RADIO COMM -	1	4	10 100
	ΦNASA 515, REDUCE			10
	SPEED TO TWO ZERO			10
	ZERO KNOTS, OVER!			10
1P170002	RADIO COMM -Φ515,	1	3	10 100
	ROGER. SLOW TO TWO			10
	ZERO ZEROΦ			10
1P170003	MON RADIO COMM -	1	3.7	10 100
	ΦNASA 515, TURN LEFT			10
	HEADING TWO ONE ZERO			10
	, OVER!			10
1P170004	RADIO COMM -Φ515,	1	2.8	10 100
	ROGER. LEFT HEADING			10
	TWO ONE ZERO!			10
1P170005	MON RADIO COMM -	1	3.5	10 100
	ΦNASA 515, TURN RT			10
	HEADING TWO SEVEN			10
	ZERO, REDUCE SPEED			10
1P170006	TO ONE EIGHT ZERO.	1	3.5	10 100
	DESCEND AND MAINTAIN			10
	SIX THOUSAND, OVER!			10
1P170007	RADIO COMM - Φ515,	1	4.0	10 100
	ROGER. RIGHT HEADING			10
	TWO SEVEN ZERO, SLOW			10
	TO ONE EIGHT ZERO,			10
1P170008	MAINTAIN SIX THOU-	1	1.5	10 100
	SAND!			10
1P200009	CALL OUT -ΦOFF!	1	0.5	10 100
1P170009	MON RADIO COMM -	1	3.5	10 100
	ΦNASA 515, TURN LEFT			10
	HEADING ONE EIGHT			10
	ZERO, DESCEND AND			10
1P170010	MAINTAIN THREE SIX	1	1.5	10 100
	HUNDRED, OVER!			10
1P170011	RADIO COMM -Φ515,	1	3.5	10 100
	ROGER. LEFT HEADING			10
	ONE EIGHT ZERO,			10
	MAINTAIN THREE SIX			10
1P170012	HUNDRED!	1	.5	10 100
1P170013	MON RADIO COMM -	1	3.5	10 100
	ΦNASA 515, REDUCE			10
	SPEED TO ONE SIX			10
	ZERO KNOTS, OVER!			10
1P170014	RADIO COMM -Φ515,	1	3.0	10 100
	ROGER. SLOW TO ONE			10
	SIX ZERO!			10
1P170015	MON RADIO COMM -	1	3.0	10 100
	ΦNASA 515, YOU ARE			10
	SIX MILES FROM THE			10
	APPROACH GATE. YOU			10
1P170016	ARE CLEARED FOR AN	1	4.0	10 100
	MLS RUNWAY ZERO			10
	EIGHT APPROACH. CON-			10
	TACT ATLANTA TOWER			10
1P170017	AFTER CROSSING GATE	1	3.0	10 100
	AT ONE NINER POINT			10
	FIVE, OVER!			10
1P170018	RADIO COMM -Φ515,	1	4.0	10 100
	ROGER. MSL RUNWAY			10

	ZERO EIGHT APPROACH,			10
	TOWER AFTER GATE ON			10
1P170019	ONE NINER POINT FIVE	1	1.0	10 100
1P170020	MON RADIO COMM -	1	3.5	10 100
	ΦNASA 515, MAINTAIN			10
	CURRENT SPEED UNTIL			10
	CROSSING APPROACH			10
1P170021	GATE, OVER!	1	.75	10 100
1P170022	RADIO COMM -ΦATLANTA	1	4.0	10 100
	TOWER, THIS IS NASA			10
	515, OVER APPROACH			10
	GATE FOR RUNWAY			10
1P170023	ZERO EIGHT, OVER!	1	1.0	10 100
1P170024	MON RADIO COMM -	1	3.5	10 100
	ΦNASA 515, ATLANTA			10
	TOWER, ROGER. CLEAR-			10
	ED TO LAND RUNWAY			10
1P170025	ZERO EIGHT. WIND	1	3.5	10 100
	ONE ONE ZERO AT ZERO			10
	NINER.!			10
1P170026	CALL OUT -ΦRUNWAY 08	1	3	10 100
	MSL ON NAV 1 AND			10
	NAV 2!			10
1P180001	MON RADIO COMM -	1	4	10 100
	ΦNASA 515, CONTACT			10
	ATLANTA TOWER ON ONE			10
	ONE NINER POINT FIVE			10
1P180002	, OVER.!	1	.5	10 100
1P180003	RADIO COMM - Φ515,	1	2.7	10 100
	ROGER. ONE ONE NINER			10
	POINT FIVE.!			10
1P180004	MON RADIO COMM -	1	4	10 100
	ΦNASA 515, CONTACT			10
	TOWER AT THE OUTER			10
	MARKER ON ONE ONE			10
1P180005	NINER POINT FIVE,	1	1.5	10 100
	OVER.!			10
1P180006	RADIO COMM -Φ515,	1	4	10 100
	ROGER, TOWER AT			10
	OUTER MARKER ON ONE			10
	ONE NINER POINT FIVE			10
1P200001	INTPHN COMM -ΦADVISE	1	1.8	10 100
	WHEN CHOCKS IN			10
	PLACE!			10
1P200002	MON INTPHN COMM -	1	0.6	10 100
	ΦROGER!			10
1P200003	MON INTPHN COMM -	1	1.1	10 100
	ΦCHOCKS IN PLACE!			10
1P200004	INTPHN COMM -ΦROGER!	1	0.6	10 100
1P200005	CALL OUT-ΦSHUTDOWN	1	1.2	10 100
	CHECKLIST!			10
1P200006	CALL OUT -ΦFUEL!	1	0.7	10 100
1P200007	CALL -ΦPUMPS	1	0.8	10 100
	OFF!			10
1P200008	CALL OUT -ΦGALLEY	1	0.9	10 100
	POWER!			10
1P200010	CALL OUT- ΦELECTRI-	1	1	10 100
	CAL!			10
1P200011	CALL OUT -ΦON!	1	0.7	10 100
1P200012	CALL OUT -ΦEMERGENCY	1	1.1	10 100

	EXIT LIGHTS!				10
1P200013	CALL OUT -SEAT BELT 1	1.2			10 100
	LIGHT!				10
1P200014	CALL OUT -WINDOW 1	1			10 100
	HEAT!				10
1P200015	CALL OUT -PITOT 1	1			10 100
	HEAT!				10
1P200016	CALL OUT -ANTI-ICE! 1	1.2			10 100
1P200017	CALL OUT -SYSTEM B 1	1.5			10 100
	PUMPS!				10
1P200018	CALL OUT -AIR COND 1	2.1			10 100
	AND PRESSURIZATION!				10
1P200019	CALL OUT -ONE PACK, 1	3			10 100
	GROUND/BLEEDS ON,				10
	GROUND!				10
1P200020	CALL OUT -ANTI-COL- 1	1.2			10 100
	LISSION LT!				10
1P200021	CALL OUT -START 1	1.2			10 100
	SWITCHES!				10
1P200022	ALL OUT -AUTO 1	1			10 100
	BRAKES!				10
1P200023	CALL OUT -RADAR AND 1	1.4			10 100
	TRANSPONDER!				10
1P200024	CALL OUT -SPEED- 1	1			10 100
	BRAKE!				10
1P200025	CALL OUT -FLAPS! 1	0.8			10 100
1P200026	CALL OUT -PARKING 1	1			10 100
	BRAKES!				10
1P200027	CALL OUT -START 1	1			10 100
	LEVERS!				10
1P200029	CALL OUT -UP! 1	0.6			10 100
1P200030	CALL OUT -DOWN 1	1.2			10 100
	DETENT!				10
1P200031	CALL OUT -RELEASED 1	1			10 100
1P200032	CALL OUT -CUTOFF! 1	0.9			10 100
1P200033	CALL OUT -OXYGEN 1	1.5			10 100
	REGULATOR!				10
1P200034	CALL OUT -OFF,100! 1	2.5			10 100
1P200035	CALL OUT -CHECKLIST 1	2.5			10 100
	COMPLETE DOWN TO				10
	SECURE!				10
1P200036	CALL OUT -APU! 1	1			10 100
1P200037	CALL OUT -BATTERY! 1	1			10 100
1P200038	CALL OUT -SHUTDOWN 1	1.5			10 100
	CHECKLIST COMPLETE!				10
1P200039	CALL OUT -CONTINUE 1	1.2			10 100
	CHECKLIST!				10
1P200040	MON INTPHN COMM - 1	1.5			10 100
	TESTING, TESTING,				10
	OVER!				10
1P200041	INTPHN COMM - 1	3			10 100
	ROGER, HEAR YOU				10
	LOUD AND CLEAR. ARE				10
	CHOCKS SET, OVER!				10
1P200042	MON INTPHN COMM - 1	.8			10 100
	CHOCKS IN PLACE !				10
1Q 01	MON VHF-1L FREQ IND 1	.77	100		10
	2	4.48	90		10
	3	4.97	90		10
	4	4.97	90		10

1Q	02	SET VHF-1L FREQ-	1	2.90	10	100	10	
		WHOLE NO.	2	3.00	10	100	10	
1Q	03	SET VHF-1L FREQ-	1	1.58	10	100	10	
		FRACTIONS	2	1.97	10	100	10	
1Q	04	ADJ VHF-1L VOLUME	1	1.58	10	100	10	
			2	2.15	10	100	10	
			3	1.58	10	100	10	
			4	2.15	10	100	10	
1Q	05	SET VHF-1L COMM TRR	1	1.45	20	100	10	
		SW TO LEFT	2	1.45	20		10	
1Q	06	SET VHF-1L COMM TFR	1	1.45	20	100	10	
		SW TO RIGHT	2	1.45	20	100	10	
1Q	07	MON VHF-1R FREQ IND	1	.77	100		10	
			2	3.64	90		10	
			3	4.51	90		10	
			4	5.94	90		10	
1Q	08	SET VHF-1R FREQ-	1	2.05	10	100	10	A
		WHOLE NUMBERS	2	2.93	10	100	10	
			3	2.05	10	100	10	AC
			4	2.97	10	100	10	AC
1Q	09	SET VHF-1R FREQ-	1	1.58	10	100	10	
		FRACTIONS	2	1.97	10	100	10	
1Q	10	ADJ VHF-1R VOLUME	1	1.58	0	100	10	AC
			2	2.18	50	100	10	
			3	1.58	0	100	10	
			4	2.18	50	100	10	
1Q	11	SET COMM 1 MIC SEL	1	2.71	100	100	10	A
		SW TO VHF-1	2	2.80	100	100	10	AC
1Q	12	SET COMM 1 VHF-1	1	2.21	100	100	10	A
		COMM RECVR SW TO ON	2	2.34	100	100	10	AC
1Q	13	SET COMM 1 VHF-1	1	2.21	100	100	10	
		COMM RECVR SW TO OFF	2	2.34	100	100	10	
1Q	14	ACT COMM 1 PTT SW	1	1.40	20	100	10	
			2	1.39	20	100	10	
			3	5.00	5	100	10	
			4	12.00	3	100	10	
1Q	15	COMM VIA VHF-1	1	5			10	
			2	12			10	
			3	1.7			10	
			4	7			10	
1Q	16	MON VHF-1 COMM AUDIO	1	12			10	
			2	7			10	
			3	6			10	
			4	3			10	
1Q	17	SET COMM 2 VHF-1	1	2.29	100	100	10	A
		COMM RECVR SW TO ON	2	2.27	100	100	10	AC
1Q	18	SET COMM 2 VHF-1	1	2.29	100	100	10	
		COMM RECVR SW TO OFF	2	2.27	100	100	10	
1Q	19	SET COMM 2 MIC SEL	1	2.79	100	100	10	A
		SW TO VHF-1	2	2.71	100	100	10	AC
1Q	20	SET COMM 3 VHF-1	1	2.46	100	100	10	A
		COMM RECVR SW TO ON	2	2.45	100	100	10	AC
1Q	21	SET COMM 3 VHF-1	1	2.46	100	100	10	
		COMM RECVR SW TO OFF	2	2.45	100	100	10	
1Q	22	SET COMM 3 MIC SEL	1	2.97	100	100	10	A
		SW TO VHF-1					10	
1Q	23	ACT COMM 1 PUSH-TO-	1	1.7	100		10	
		TALK SW	2	3.5	100		10	
1Q	24	ACTUATE PUSH-TO-TALK	1	7		100	10	
		SW ON CONTROL HAND-	2	1.7		100	10	

	GRIP	3	3.5		100	10
		4	3		100	10
1Q	28 COMM VIA VHF-1	1	3.5			10
		2	3			10
1Q	30 MON VHF-1 COMM AUDIO	1	5			10
		2	4			10
		3	24			10
1R	01 MON VHF-2L FREQ IND	1	.76	100		10
		2	4.55	90		10
		3	4.51	90		10
1R	02 SET VHF-2L FREQ	1	2.97	10	100	10
	WHOLE NUMBERS	2	2.93	10	100	10
1R	03 SET VHF-2L FREQ	1	1.58	10	100	10
	FRACTIONS	2	1.58	10	100	10
		3	1.97	10	100	10
1R	04 ADJ VHF-2L VOLUME	1	1.58		100	10
		2	2.97	50	100	10
		3	1.58		100	10
		4	2.97	50	100	10
1R	05 SET VHF-2 COMM TFR	1	1.47	20	100	10
	SW TO LEFT	2	1.47	20	100	10
1R	06 SET VHF-2 COMM TFR	1	1.47	20	100	10
	SW TO RIGHT	2	1.47	20	100	10
		3	1.97	20	100	10
1R	07 MON VHF-2R FREQ IND	1	.77	100		10
		2	4.58	80		10
		3	4.48	80		10
1R	08 SET VHF-2R FREQ-	1	2.03	10	100	10
	WHOLE NO.S	2	3.00	10	100	10
		3	2.03	10	100	10
		4	2.90	10	100	10
1R	09 SET VHF-2R FREQ-	1	1.58	10	100	10
	FRACTIONS	2	1.58	10	100	10
		3	1.97	10	100	10
1R	10 ADJ VHF-2R VOLUME	1	1.58		100	10
		2	3.00	50	100	10
		3	1.58		100	10
		4	3.00	50	100	10
1R	11 SET COMM 2 MIC SEL	1	2.79	100	100	10
	SW TO VHF-2	2	2.71	100	100	10
1R	12 SET COMM 2 VHF-2	1	1.43	100	100	10
	COMM RECVR SW TO ON	2	1.43	100	100	10
1R	13 SET COMM 2 VHF-2	1	1.43	100	100	10
	COMM RECVR SW TO OFF	2	1.43	100	100	10
1R	14 ACT COMM 2 PTT SW	1	1.41	20		10
		2	1.41	20		10
		3	5.50	5		10
		4	3.50	10		10
1R	15 COMM VIA VHF-2	1	3.7			10
		2	5.5			10
		3	3.5			10
		4	4			10
1R	16 MON VHF-2 COMM AUDIO	1	5.5			10
		2	3.5			10
		3	3.2			10
		4	5			10
1R	17 SET COMM 1 VHF-2	1	1.42	100	100	10
	COMM RECVR SW TO ON	2	1.42	100	100	10
1R	18 SET COMM 1 VHF-2	1	1.42	100	100	10
	COMM RECVR SW TO OFF	2	1.42	100	100	10

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1R	19	SET COMM 1 MIC SEL	1	2.71	100	100	10	A
		SW TO VHF-2	2	2.80	100	100	10	AC
1R	20	SET COMM 3 VHF-2	1	1.43	100	100	10	A
		COMM RECVR SW TO ON	2	1.43	100	100	10	
1R	21	SET COMM 3 VHF-2	1	1.43	100	100	10	
		COMM RECVR SW TO OFF	2	1.43	100	100	10	
1R	22	SET COMM 3 MIC SEL	1	2.97	100	100	10	A
		SW TO VHF-2					10	
1R	23	ACT PUSH-TO-TALK SW	1	3.7		100	10	
		ON CONTROL HANDGRIP	2	4.8		100	10	
			3	2.5		100	10	
			4	1.5		100	10	
1R	24	ACT PUSH-TO-TALK SW	1	1.7		100	10	
		ON CONTROL HANDGRIP	2	2.3		100	10	
			3	3.1		100	10	
			4	4		100	10	
1R	25	ACT PUSH-TO-TALK SW	1	6.8		100	10	
		ON CONTROL HANDGRIP	2	4.4		100	10	
			3	3		100	10	
			4	6		100	10	
1R	26	ACT PUSH-TO-TALK SW	1	4.2		100	10	
		ON CONTROL HANDGRIP	2	5		100	10	
			3	2.7		100	10	
			4	7.5		100	10	
1R	27	ACT COMM 2 PUSH-TO-TALK SW	1	4.6	100		10	
			2	1.7	100		10	
			3	4.2	100		10	
			4	4	100		10	
1R	28	ACT COMM 2 PUSH-TO-TALK SW	1	4.25	100		10	
			2	5	100		10	
1R	30	ACT PUSH-TO-TALK SW	1	4.5	100	100	10	
		ON CONTROL HANDGRIP	2	3.3		100	10	
			3	4.23		100	10	
			4	10		100	10	
1R	32	MON VHF-2 COMM AUDIO	1	2.5			10	
			2	6				
			3	6.8				
			4	7				
1R	33	MON VHF-2 COMM AUDIO	1	9				
			2	6.2				
			3	1.7				
			4	3				
1R	34	MON VHF-2 COMM AUDIO	1	9.5				
			2	4.3				
			3	7.5				
			4	4.5				
1R	35	MON VHF-2 COMM AUDIO	1	8				
			2	10				
			3	30				
			4	16.				
1R	36	COMM VIA VHF-2	1	4.8				1R
			2	2.5				
			3	1.5				
			4	1.7				
1R	37	COMM VIA VHF-2	1	2.3				
			2	3.1				
			3	4.4				
			4	3				
1R	38	COMM VIA VHF-2	1	6				
			2	4.2				

		3	5						
		4	2.7						
1R	39 COMM VIA VHF-2	1	7.5						
		2	3.1						
		3	4.5						
		4	3.3						
1R	40 COMM VIA VHF-2	1	4						
		2	4.25						5
		3	10						5
		4	5.5						
1R	41 COMM VIA VHF-2R	1	6.8						10
		2	11.						10
1R	42 ACT PUSH-TO-TALK SW ON CONTROL HANDGRIP	1	11.			100			10
1S	01 MON VHF-3L FREQ IND	1	.77	100					10
		2	5.00	90					10
		3	5.06	90					10
1S	02 SET VHF-3L FREQ- WHOLE NUMBERS	1	3.03	10	100				10
		2	3.09	10	100				10
1S	03 SET VHF-3L FREQ- FRACTIONS	1	1.97	10	100				10
		2	1.97	10	100				10
1S	04 ADJ VHF-3L VOLUME	1	1.97	10	100				10
		2	3.03	50	100				10
		3	1.97	0	100				10
		4	3.03	50	100				10
1S	05 SET VHF-3 COMM TFR SW TO LEFT	1	1.45	50	100				10
		2	1.45	50	100				10
1S	06 SET VHF-3 COMM TFR SW TO RIGHT	1	1.45	50	100				10
		2	1.45	50	100				10
1S	07 MON VHF-3R FREQ IND	1	.77	100					10
		2	5.01	90					10
		3	5.05	90					10
1S	08 SET VHF-3R FREQ WHOLE NO.S	1	2.05	10	100				10
		2	3.04	10	100				10
		3	2.05	10	100				10
		4	3.08	10	100				10
1S	09 SET VHF-3R FREQ- FRACTIONS	1	1.97	10	100				10
		2	1.97	10	100				10
		2	1.97	100					10
1S	10 ADJ VHF-3R VOLUME	1	2.05	50	100				10
		2	3.04	50	100				10
		3	2.05	50	100				10
		4	3.08	50	100				10
1S	11 SET COMM 3 MIC SEL SW TO VHF-1	1	2.97	100	100				10
		2	2.93	100	100				10
1S	12 ACT COMM 3 PUSH-TO- TALK SW	1	1.41	50	100				10
		2	1.42	50	100				10
1T	01 SET LOUDSPEAKER TO ON	1	2.39	100	100				10
		2	2.39	100	100				10
1T	02 SET LOUDSPEAKER TO OFF	1	2.39	100	100				10
		2	2.39	100	100				10
1T	03 ADJUST LOUDSPEAKER VOLUME	1	2.11	100	100				10
		2	2.11	100	100				10
		3	3.04	100	100				10
		4	3.04	100	100				10
2H	01 PRESS ATT CWS MODE SW	1	1.35	100	100				10
		2	1.44	100	100				10
		3	1.44	100	100				10
2H	02 MON ATT CWS MODE LT GREEN - ATT CWS	1	1.05	100					10

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2H	26	ROTATE FPA SEL KNOB	1	2.45	100	100	10	AP
2H	27	READ FPA SEL VALUE	1	1.08	100		10	AP
		ON DIGITAL INDIC					10	
2H	28	PRESS ALT ENG MODE S	1	1.42	100	100	10	AP
		SW					10	
2H	29	MONITOR ALT ENG MODE	1	.78	100		10	AP
		LT GREEN - ALT ENG					10	
		MODE ENGAGED					10	
2H	30	MON ALT ENG MODE LT	1	.78	100		10	
		ORANGE - ALT ENG					10	
		MODE ARMED					10	
2H	31	MON ALT ENG MODE LT	1	.78	100		10	
		BLUE - ALT ENG MODE					10	
		PRESELECTED					10	
2H	32	MON ALT ENG MODE LT	1	.78	100		10	
		DARK - ALT ENG MODE					10	
		DISENGAGED					10	
2H	33	ROTATE ALT ENG KNOB	1	2.47	100	100	10	AP
2H	34	READ ALT ENG VALUE	1	1.06	100		10	A
		ON DIGITAL INDIC					10	
2H	35	PRESS HOR PATH MODE	1	1.37	100	100	10	A
		SW	2	2.15	100	100	10	A
			3	1.72	100	100	10	A
2H	36	MON HOR PATH MODE LT	1	.78	100		10	
		GREEN - HOR PATH					10	
		MODE ENGAGED					10	
2H	37	MON HOR PATH MODE LT	1	.78	100		10	
		ORANGE - HOR PATH					10	
		MODE ARMED					10	
2H	38	MON HOR PATH MODE LT	1	.78	100		10	
		DARK - HOR PATH MODE					10	
		DISENGAGED					10	
2H	39	PRESS VERT PATH MODE	1	1.36	100	100	10	A
		SW					10	
2H	40	MON VERT PATH MODE L	1	.78	100		10	
		GREEN - VERT PATH					10	
		MODE ENGAGED					10	
2H	41	MON VERT PATH MODE L	1	.78	100		10	
		ORANGE - VERT PATH					10	
		MODE ARMED					10	
2H	42	MON VERT PATH MODE	1	.78	100		10	
		LT DARK - VERT PATH					10	
		MODE DISENGAGED					10	
2H	43	PRESS CAS ENG MODE					10	
		SW					10	
2H	44	MON CAS ENG MODE	1	.78	100		10	A
		LT GREEN - CAS					10	
		MODE ENGAGED					10	
2H	45	MON CAS ENG MODE	1	.78	100		10	
		LT BLUE - CAS ENG					10	
		MODE PRESELECTED					10	
2H	46	MON CAS ENG MODE	1	.78	100		10	
		LT DARK - CAS ENG					10	
		MODE DISENGAGED					10	
2H	47	ROTATE CAS ENF KNOB	1	2.45	100		10	A
2H	48	READ CAS ENG VALUE	1	1.04	100		10	A
		ON DIGITAL INDIC					10	
2H	49	PRESS TIME PATH MODE	1	1.35	100	100	10	A
		SW					10	
2H	50	MON TIME PATH MODE	1	.78	100		10	

		LT GREEN - TIME				10	
		PATH MODE ENGAGED				10	
2H	51	MON TIME PATH MODE	1	.78	100	10	
		SW DARK - TIME PATH				10	
		MODE DISENGAGED				10	
2H	52	ACT LEFT AGCS LIGHTS	1	2		100	
		TEST SW				10	
2H	53	MON AGCS PANEL LTS	1	2	100	10	
		TEST				10	
2H	54	ACT RIGHT AGCS	1	2		100	
		LIGHTS TEST SW				10	
2J	01	MON ROLL ATT INDIC	1	2.02	100	10	P
			2	10	5	5	
			3	30	5	5	
			4	180	5	5	
2J	02	MON PITCH ATTITUDE	1	1.12	100	10	P
		INDIC	2	10	10	10	
			3	30	10	10	
			4	180	10	10	
2J	03	MONITOR ALTITUDE	1	.78	100	10	P
		DIGITAL CALLOUT				10	
2J	04	MON FLT PATH ACCEL	1	2.19	100	10	P
		INDIC	2	10	5	5	
			3	30	5	5	
			4	60	5	5	
2J	05	MON FLT PATH ANGLE	1	2.19	100	10	
			2	10	10	10	
		INDIC	3	30	10	10	
			4	180	10	10	
2J	06	MON PITCH FLT DIREC	1	2.19	100	10	
2J	07	MON ROLL FLT DIREC	1	2.19	100	10	
2J	08	MON ACCEL COMMAND	1	2.19	100	10	
2J	09	MON FLT PATH ANGLE	1	2.19	100	10	
		COMMAND				10	
2J	10	MON FLT PATH COMMAND	1	2.19	100	10	
		TO NEXT WPT				10	
2J	11	MON FLT PATH COMMAND	1	2.19	100	10	
		TO DESTINATION IN				10	
		30 SECONDS				10	
2J	12	MON WAYPOINT IDENTIS	1	2.19	100	10	
2J	13	MON ILS BOX	1	2.19	100	10	
		INDIC	2	10	5	5	
			3	30	5	5	
			4	60	5	5	
2J	14	MON ILS CROSS	1	2.19	100	10	
		INDIC	2	10	5	25	
			3	30	5	25	
			4	60	5	25	
2J	15	MON TV VIDEO	1	2.19	100	10	
			2	30	10	10	
2J	16	ACT EADI AUTO SW	1	2.13	100	100	AP
			2	2.35	100	100	P
2J	17	SEL MAN EADI PITCH				10	
		REF MODE/MON SW LT				10	
		ON				10	
2J	18	ROTATE PITCH REF	1	2.05	100	100	AP
		KNOB TO SELECT				10	
		PITCH				10	
2J	19	MON PITCH REF INDIC	1	1.12	100	10	AP
			2	10	5	5	

		3	30	5		5	
		4	180	5		5	
2J	20 ROTATE DH KNOB TO	1	1.11	10	100	10	AP
	SELECT DH VALUE	2	2.44	10	100	10	
2J	21 MON DH INDIC	1	1.11	90		10	
		2	2.44	90		10	
2J	22 MON FLASHING CENTER	1	2.27	100		10	
	DOT ON EADI	2	30	10		10	
2J	23 ACTUATE DH TEST SW	1	2.27	100	100	10	
2J	24 MON 100 FT INDIC ON	1	2.27	100		10	
	EADI					10	
2J	25 SELECT LAND MODE	1	2.67	100	100	10	AP
		2	2.67	100	100	10	
2J	26 SELECT CRUISE MODE	1	2.67	100	100	10	
		2	1.35	100	100	10	
2J	27 SELECT TEST MODE	1	2.67	100	100	10	
2J	28 MON EADI TEST PAT	1	2.67	100		10	
2J	29 SELECT SPD ERR OPTIO	1	1.35	100	100	10	
		2	2.15	100	100	10	
2J	30 MON SPD ERR BAR					10	
2J	31 SEL ILS OPTION	1	1.35	100	100	10	
		2	2.15	100	100	10	
		3	2.15	100	100	10	
2J	32 SEL TV OPTION	1	2.15	100	100	10	AP
		2	1.35	100	100	10	
2J	33 SEL FPT DIR OPTION	1	2.15	100	100	10	
		2	1.35	100	100	10	
2J	34 SELECT V-NAV OPTION	1	1.32	100	100	10	AP
		2	2.15	100	100	10	
2J	35 SELECT RUNWAY OPTION	1	1.36	100	100	10	AP
		2	2.15	100	100	10	
2J	36 ADJ EADI BRIGHTNESS	1	2	100	100	10	
2J	37 ADJ EADI CONTRAST	1	2	100	100	10	
2J	38 MONITOR LOCALIZER	1	5	20		20	
	INDICATOR	2	10	10		10	
		3	30	20		20	
		4	60	20		20	
2J	39 MON GLIDE SLOPE	1	5	20		20	
	ATT INDIC	2	10	20		20	
		3	30	20		20	
		4	60	20		20	
	DOWN TO 30KTS						
2J	40 MON EADI RNWY	1	10	10		5	
		2	30	10		5	
		3	60	10		5	
		4	180	10		5	
2J	41 MON EADI DRIFT INDIC	1	10	10		10	
		2	30	10		10	
		3	60	10		10	
		4	180	10		10	
2K	01 SEL TRACK UP OPTION	1	2.64	100	100	10	AP
		2	1.97	100	100	10	
		3	2.00	100	100	10	AC
		4	2.67	100	100	10	AC
2K	02 SEL NORTH UP OPTION	1	2.64	100	100	10	
		2	1.97	100	100	10	
		3	2.00	100	100	10	
		4	2.67	100	100	10	
2K	03 SEL TEST OPTION	1	2.64	100	100	10	
		2	1.97	100	100	10	

		3	2.00	100	100	10	
		4	2.67	100	100	10	
2K	04 MON MFD TEST PATT	1	3	100		10	
2K	05 SEL 1 NM MAP SCALE	1	2.65	100	100	10	AP
		2	1.92	100	100	10	AP
		3	1.96	100	100	10	AC
		4	2.68	100	100	10	AC
2K	06 SEL 2 NM MAP SCALE	1	2.65	100	100	10	
		2	1.92	100	100	10	
		3	1.96	100	100	10	
		4	2.68	100	100	10	
2K	07 SEL 4 NM MAP SCALE	1	2.65	100	100	10	
		2	1.92	100	100	10	
		3	1.96	100	100	10	
		4	2.68	100	100	10	
2K	08 SEL 8 NM MAP SCALE	1	2.65	100	100	10	
		2	1.92	100	100	10	
		3	1.96	100	100	10	
		4	2.68	100	100	10	
2K	09 SEL 16 NM MAP SCALE	1	2.65	100	100	10	
		2	1.92	100	100	10	
		3	1.96	100	100	10	
		4	2.68	100	100	10	
2K	10 SEL 32 NM MAP SCALE	1	2.68	100	100	10	AP
		2	1.92	100	100	10	
		3	1.96	100	100	10	
		4	2.68	100	100	10	
2K	11 MON MAP SCALE CALLOU	1	.83	100		10	AP
2K	12 MON 1 NM MAP VIDEO	1	2.27	100		10	AP
2K	13 MON 2 NM MAP VIDEO	1	2.27	100		10	
2K	14 MON MAP VIDEO	1	2.27	100		10	
		2	10	10		10	
		3	30	10		10	
		4	180	10		10	
2K	15 MON MAP VIDEO	1	2.27	100		10	
		2	60	5		5	
2K	16 MON MAP VIDEO	1	2.27	100		10	
2K	17 MON MAP VIDEO	1	2.27	100		10	
		2	17	100		10	
2K	18 SEL NAV AIDES OPTION	1	2.07	100	100	10	AP
		2	2.13	100	100	10	AC
		3	1.38	100	100	10	
		4	1.38	100	100	10	
2K	19 SEL TERRAINE OPTION	1	1.38	100	100	10	AC
		2	2.07	100	100	10	
		3	1.38	100	100	10	
		4	2.13	100	100	10	
2K	20 SEL AIRPORTS OPTION	1	1.37	100	100	10	
		2	2.07	100	100	10	
		3	1.38	100	100	10	
		4	2.13	100	100	10	
2K	21 SEL WPT ALT OPTION	1	1.46	100	100	10	AP
		2	2.07	100	100	10	
		3	1.38	100	100	10	
		4	2.13	100	100	10	
2K	22 SEL GRP OPTION	1	1.37	100	100	10	AP
		2	1.33	100	100	10	AC
		3	2.07	100	100	10	
		4	2.13	100	100	10	
2K	23 SEL T NAV OPTION	1	2.13	100	100	10	AC

		2	1.38	100	100		10
		3	2.07	100		100	10
		4	2.13	100	100		10
2K	24 SEL ALT RANGE OPTION	1	1.38	100	100		10
		2	2.07	100	100		10
		3	2.13	100		100	10
		4	1.38	100		100	10
2K	25 SEL TREND VECT OPTION	1	1.38	100	100		10
		2	2.07	100	100		10
		3	2.13	100		100	10
		4	1.38	100		100	10
2K	26 MON NV AIDES SYMBOLS			100		100	10
2K	27 MON TERRAINE SYMBOLS						10
2K	28 MON AIRPORT SYMBOLS						10
2K	29 MON WAYPOINT ALT WITH NAV AIDES SYM						10
2K	30 MON GEO REF PT SYM						10
2K	31 MON TIME BOX AND FUTURE PTS SYMBOLS	1	.001	100			10
2K	32 MON ALT/RNG SYMBOLS	1	2	100			10
2K	33 MON CURVED TREND VECTOR SYMBOLS	1	10	10			10
		2	30	10			10
		3	180	10			10
		4	60	5			5
2K	34 DESELECT NAV AIDES OPTION	1	1.38	100		100	10
		2	2.07	100		100	10
		3	1.38	100	100		10
		4	2.13	100	100		10
2K	35 DESELECT TERRAIN OPTION	1	1.38	100		100	10
		2	2.07	100		100	10
		3	1.38	100	100		10
		4	2.13	100	100		10
2K	36 DESELECT AIRPORTS OPTION	1	1.38	100		100	10
		2	2.07	100		100	10
		3	1.38	100	100		10
		4	2.13	100	100		10
2K	37 DESELECT WPT ALT OPTION	1	1.38	100		100	10
		2	2.07	100		100	10
		3	1.38	100	100		10
		4	2.13	100	100		10
2K	38 DESELECT GRP OPTION	1	1.38	100		100	10
		2	2.07	100		100	10
		3	1.38	100	100		10
		4	2.13	100	100		10
2K	39 DESELECT T NAV OPTION	1	1.38	100		100	10
		2	2.07	100		100	10
2K	40 DESELECT ALT RANGE OPTION	1	1.38	100		100	10
		2	2.07	100		100	10
		3	1.38	100	100		10
		4	2.13	100	100		10
2K	41 DESELECT TREND VEC OPTION	1	1.38	100		100	10
		2	2.07	100		100	10
		3	1.38	100	100		10
		4	2.13	100	100		10
2K	42 MON HOLDING PATTERN SYMBOL						10
2K	43 MON ADIZ BDRY SYM						10
2K	44 MON FIR BDRY SYMBOL						10
2K	45 MON OFFSET FLT PATH SYMBOLS						10

2K	46	MON STRAIGHT TREND	1	10	10	10	
		VECTOR SYMBOL	2	30	10	10	
			3	180	10	10	
			4	60	5	5	
2K	47	MON TRACK ANGLE SYM	1	10	10	10	
2K	48	MON AGCS MODE INDIC	1	.83	100	10	AP
2K	49	MON GROUND SPEED INC	1	.79	100	10	AP
2K	50	MON HAV MODE INDIC	1	.79	100	10	
2K	51	MON WIND DIREC/VEL	1	.79	100	10	
		INDIC				10	
2K	52	MON FTL PATH SYMBOL	1	10	10	10	
2K	53	MON HDG POINTER AND	1	2.03	100	10	AP
		TAPE				10	
2K	54	ADJ MFD BRIGHTNESS	1	2	100	100	
2K	55	ADJ MFD CONTRAST	1	2	100	100	
2K	56	MON MFD FOR ATC	1	5	100	10	
		SITUATION DISP	2	10	50	10	
			3	15		10	
			4	30	15	10	
2K	57	MON MFD FOR ATC	1	45	10	10	
		SITUATION DISP	2	60	10	10	
			3	90	10	10	
			4	120	10	10	
2K	58	MON MFD FOR ATC	1	240	10	10	
		SITUATION DISP	2	360	10	10	
			3	540	10	10	
			4	1140	10	10	
2L	01	RESET T/A/M SEL SW	1	2.67	100	100	AP
2L	02	ADJ NCDU DIM CONT	1	2.78	100	100	AP1
2L	03	MON NCDU ALERT LT ON	1	2.08	100	10	AP
2L	04	MON NCDU ALERT LT	1	2.08	100	10	
2L	05	MON NCDU FAIL LT ON	1	2.08	100	10	
2L	06	MON NCDL FAIL LT OFF	1	2.08	100	10	
2L	07	MON INITILIZE MODE	1	2.34	100	10	AP
		DATA	2	2.00	100	10	AP
			3	4	100	10	
2L	08	MON ATC CLR MODE	1	2.34	100	10	
		DATA	2	2.08	100	10	AP
2L	09	MON FLT PLN 1 MODE	1	2.34	100	10	
		DATA	2	2.08	100	10	AP
2L	10	MON FLT PLN 2 MODE	1	2.34	100	10	
		DATA	2	2.08	100	10	
2L	11	MON NAV DATA 1 MODE	1	2.34	100	10	
		DATA	2	2.06	100	10	
2L	12	MON NAV DATA 2 MODE	1	2.34	100	10	
		DATA	2	2.06	100	10	
2L	13	MON NAV DATA 3 MODE	1	2.34	100	10	
		DATA	2	2.06	100	10	
2L	14	MON SEL 1 MODE DATA	1	2.34	100	10	
			2	2.08	100	10	AP
2L	15	MON SEL 2 MODE DATA	1	2.34	100	10	
			2	2.08	100	10	
2L	16	MON LOOK UP 1 STATUS	1	2.34	100	10	
		DATA	2	2.08	100	10	AP
			3	7	100	10	
2L	17	MON LOOK-UP 2 ROUTE	1	2.34	100	10	
		DATA	2	2.08	100	10	
2L	18	MON LOOK-UP 3 AIRPRT	1	2.34	100	10	
		DATA	2	2.08	100	10	
2L	19	MON LINE 8 MESSAGE	1	2.34	100	10	

		2	2.06	100		10	
2L	20 PRESS ENT KEY	1	1.47	100	100	10	AP
		2	1.51	100	100	10	AP
		3	1.35	100	100	10	
2L	21 PRESS EXEC KEY	1	1.42	100	100	10	AP
		2	1.46	100	100	10	AP
		3	1.35	100	100	10	
		4	1.52	100	100	10	AP1
2L	22 PRESS REJ KEY	1	1.53	100	100	10	AP
		2	1.35	100	100	10	
2L	23 PRESS CLR KEY	1	1.53	100	100	10	
		2	1.35	100	100	10	
2L	24 PRESS UP KEY	1	1.50	100	100	10	AP
		2	1.32	100	100	10	
2L	25 PRESS DOWN KEY	1	1.50	100	100	10	AP
		2	1.32	100	100	10	AP
2L	26 PRESS NO.1 KEY	1	1.45	100	100	10	AP
		2	1.41	100	100	10	AP
		3	1.35	100	100	10	
2L	27 PRESS NO.2 KEY	1	1.35	100	100	10	AP
		2	1.48	100	100	10	
2L	28 PRESS NO.3 KEY	1	1.35	100	100	10	AP
		2	1.46	100	100	10	AP
2L	29 PRESS NO.4 KEY	1	1.35	100	100	10	AP
		2	1.46	100	100	10	
2L	30 PRESS NO.5 KEY	1	1.35	100	100	10	
		2	1.46	100	100	10	
2L	31 PRESS NO.6 KEY	1	1.35	100	100	10	AP
		2	1.44	100	100	10	AP
2L	32 PRESS NO.7 KEY	1	1.35	100	100	10	AP
		2	1.46	100	100	10	
2L	33 PRESS NO.8 KEY	1	1.44	100	100	10	AP
		2	1.35	100	100	10	
2L	34 PRESS NO.9 KEY	1	1.35	100	100	10	
		2	1.46	100	100	10	
2L	35 PRESS NO.0 KEY	1	1.35	100	100	10	
		2	1.46	100	100	10	
2L	36 PRESS (DECIMAL PT) KEY	1	1.35	100	100	10	
		2	1.46	100	100	10	
2L	37 PRESS A/WPT KEY	1	1.35	100	100	10	
		2	1.46	100	100	10	
2L	38 PRESS B/AWY KEY	1	1.35	100	100	10	
		2	1.46	100	100	10	
2L	39 PRESS C KEY	1	1.38	100	100	10	AP
		2	1.46	100	100	10	
2L	40 PRESS D KEY	1	1.35	100	100	10	AP
		2	1.32	100	100	10	AP
		3	1.46	100	100	10	
2L	41 PRESS E KEY	1	1.35	100	100	10	
		2	1.46	100	100	10	
2L	42 PRESS F/F-L KEY	1	1.35	100	100	10	
		2	1.46	100	100	10	
2L	43 PRESS G/ALT KEY	1	1.35	100	100	10	
		2	1.46	100	100	10	
2L	44 PRESS H/RTE KEY	1	1.48	100	100	10	AP
		2	1.35	100	100	10	
2L	45 PRESS I/RWY KEY	1	1.45	100	100	10	AP
		2	1.35	100	100	10	
2L	46 PRESS J KEY	1	1.35	100	100	10	
		2	1.46	100	100	10	

2L	47	PRESS K KEY	1	1.35	100	100	10	
			2	1.46	100	100	10	
2L	48	PRESS L KEY	1	1.35	100	100	10	
			2	1.46	100	100	10	
2L	49	PRESS M/GS KEY	1	1.47	100	100	10	AP
			2	1.35	100	100	10	
2L	50	PRESS N KEY	1	1.41	100	100	10	AP
			2	1.35	100	100	10	
2L	51	PRESS O/SID KEY	1	1.35	100	100	10	AP
			2	1.46	100	100	10	
2L	52	PRESS P/STAR KEY	1	1.35	100	100	10	AP
			2	1.46	100	100	10	
2L	53	PRESS Q KEY	1	1.35	100	100	10	
			2	1.46	100	100	10	
2L	54	PRESS R KEY	1	1.35	100	100	10	
			2	1.46	100	100	10	
2L	55	PRESS S KEY	1	1.35	100	100	10	
			2	1.46	100	100	10	
2L	56	PRESS T/PTA KEY	1	1.35	100	100	10	
			2	1.46	100	100	10	
2L	57	PRESS U KEY	1	1.36	100	100	10	AP
			2	1.46	100	100	10	
2L	58	PRESS V KEY	1	1.35	100	100	10	
			2	1.46	100	100	10	
2L	59	PRESS W KEY	1	1.35	100	100	10	
			2	1.46	100	100	10	
2L	60	PRESS X KEY	1	1.35	100	100	10	
			2	1.46	100	100	10	
2L	61	PRESS Y KEY	1	1.35	100	100	10	
			2	1.46	100	100	10	
2L	62	PRESS Z KEY	1	1.35	100	100	10	
			2	1.46	100	100	10	
2L	63	PRESS INIT KEY	1	1.48	100	100	10	AP
			2	1.35	100	100	10	
2L	64	PRESS ATC CLR KEY	1	2.03	100	100	10	AP
			2	1.35	100	100	10	
			3	1.46	100	100	10	
2L	65	PRESS FLT PLN KEY	1	2.03	100	100	10	AP
			2	1.40	100	100	10	AP
			3	1.35	100	100	10	
2L	66	PRESS NAV DATA KEY	1	2.03	100	100	10	
			2	1.46	100	100	10	
			3	1.35	100	100	10	
2L	67	PRESS SEL KEY	1	2.03	100	100	10	AP
			2	1.39	100	100	10	AP
			3	1.46	100	100	10	
2L	68	PRESS LOOK-UP KEY	1	2.03	100	100	10	AP
			2	1.39	100	100	10	AP
			3	1.46	100	100	10	
2L	69	MON NCDA TEST FORMAT	1	.5	100		10	
3A	01	MONITOR INDICATED	1	.6	100		10	
		AIRSPD INDIC	2	2.05	80		10	
			3	2.37	80		10	
			4	2.11	80		10	
3A	02	SET V1 BUG	1	2.57	20	100	10	CP
			2	5.00	20	100	10	P
			3	2.57	20		10	
3A	03	MON IAS POINTER	1	.2	100	100	10	
		PASSING V1 BUG	2	2.05	100		10	
			3	2.37	100		10	

3A	04 MON V1 BUG SETTING	4	2.11	100		10
		1	2.57	80		10
		2	5.00	80		10
3A	05 SET V-REF BUG	1	5.00	20	100	10
		2	2.57	20	100	10
		3	2.57	20	100	10
3A	06 MON IAS POINTER PASSING V-REF BUG	1	.2	100	100	10
		2	2.05	100		10
		3	2.37	100		10
		4	2.11	100		10
3A	07 MON V-REF BUG SETTING	1	5	80		10
		2	2.57	80		10
		3	2.37	80		10
3A	08 MON IAS POINTER OVERLAPPING V-MO INDIC	1	.2	100		10
		2	2.05	100		10
		3	2.37	100		10
		4	2.11	100		10
3A	09 MON IAS 80 KNOTS	1	2.05	100		10
		2	2.11	100		10
		3	2.37	100		10
3A	10 MONITOR AIRSPEED INDIC	1	10	10		10
		2	5	10		10
		3	30	10		10
		4	60	10		10
3A	11 MONITOR AIRSPEED INDIC	1	300	10		10
		2	120	10		10
		3	90	10		10
		4	20	10		10
3A	12 F.O. CHECK CAPTIS V-REF BUG SETTING	1	3.	100		10
3A	13 CAPT CHECK F.O. AS V-REF BUG SETTING	1	3.	100		10
3A	14 MON AIRSPEED INDIC	1	285	10		10
		2	180	10		10
		3	240	10		10
3F	01 MON MACH NO INDIC	1	2	100		10
		2	2.05	100		10
		3	2.37	10		10
		4	2.11	100		10
3F	02 MON MACH AIRSPEED WARNING CLACKER	1	2.00			10 100
3F	03 ACTUATE MACH AIRSPD TEST SW	1	2.69	100 100		10
		2	2.69	100	100	10
3H	01 SET ALTIMETER SW TO ON	1	2.10	100 100		10
		2	2.10	100	100	10
3H	02 MON CORR BARO ALT INDIC	1	.6	100		10
		2	2.05	100		10
		3	2.13	100		10
		4	2.37	100		10
3H	03 SET ALTIMETER BARO SETTING CONTROL	1	5.00	10 100		10
		2	2.65	10	100	10
		3	2.65	10 100		10
		4	5.00	10	100	10
3H	04 MONITOR ALTIMETER BARO SETTING INDIC	1	.77	90		10
		2	2.37	90		10
		3	2.65	90		10
		4	5.00	90		10
3H	05 F.O. CHECK CAPTAS ALTIMETER BARO SET AND INDICATED ALTI-	1	3.00	100		10
						10

3A

CP

3L	05 MON IVSI	1	.6	100		10
3N	01 WIND AND SET CLOCK	1	2.50	20	100	10
		2	2.50	20	100	10
3N	02 MONITOR CLOCK	1	2.10	80		10
		2	2.16	80		10
		3	2.24	80		10
		4	2.19	80		10
3N	03 START ELAPSED TIME	1	2.10	5	50	5
	INDIC					5
3N	04 RESET ELAPSED TIME	1	2.10	5	50	5
	INDIC					5
3N	05 MONITOR CLOCK	1	5	10		10
		2	10	10		10
		3	240	10		10
3P	01 ACTUATE GYRO CAGING	1	2.70	100	100	10
	SW					10
3P	02 SET GYRO PITCH TRIM	1	2.22	100	100	10
3P	03 MON STDBY HORIZON	1	2.22	100		10
	INDIC PWR FAIL FLAG					10
3P	04 MON AIRPLANE REF	1	2.22	100		10
3P	05 MONITOR BANK ANGLE	1	2.22	100		10
	INDIC					10
3P	06 MONITOR PITCH ANGLE	1	2.22	100		10
	INDIC					10
3R	10 MON PITCH ATTITUDE	1	2.05	100		10
	INDIC ON FDI	2	.211	100		10
		3	2.58	100		10
		4	10	10		10
3R	11 MON BANK ATTITUDE	1	2.05	100		10
	INDIC ON FDI	2	2.11	100		10
		3	2.58	100		10
3R	12 MON DECISION HGT LT	1	2.05	50		10
	ON FDI	2	.211	50		10
		3	2.58	50		10
3R	13 MON DECISION HGT LT	1	2.05	50		10
	OFF ON FDI	2	2.11	50		10
		3	2.58	50		10
3R	14 MON COMMAND BAR	1	2.05	100		10
	ATTITUDE INDIC ON	2	2.11	100		10
	FDI	3	2.58	100		10
3R	15 MON RED FLAG IN	1	2.05	100		10
	VIEW ON FDI	2	2.11	100		10
		3	2.58	100		10
3R	16 MONTIOR INDICATION	1	2.21	100		10
	OF DEVIATION FROM	2	3	100		10
	LOCALIZER ON FDI	3	10	15		10
		4	240	15		10
3R	17 MON SLIP INDIC ON	1	2.05	100		10
	FDI	2	2.11	100		10
		3	2.58	100		10
3R	18 MON FD FLAG OUT	1	2.05	100		10
	OF VIEW ON FDI	2	2.11	100		10
		3	2.58	100		10
3R	19 MON RUNWAY FLAG IN	1	2.05	100		10
	VIEW ON FDI	2	2.11	100		10
		3	2.58	100		10
3R	20 MON RUNWAY FLAG OUT	1	2.05	100		10
	OF VIEW ON FDI	2	2.11	100		10
		3	2.58	100		10
3R	21 MON RATE OF TURN	1	2.05	100		10

C
CP

C

		FLAG ON FDI	2	2.11	100		10	
			3	2.58	100		10	
3R	22	MONITOR RUNWAY	1	2.05	100		10	
		SYMBOL OUT OF VIEW	2	2.11	100		10	
		ON FDI	3	2.58	100		10	
3R	23	MONITOR ATTITUDE	1	2.05	100		10	
		RELATIVE TO RUNWAY	2	2.11	100		10	
		SYMBOL ON FDI	3	2.58	100		10	
3R	24	ACTUATE FDI PRESS-	1	2.01	100	100	10	
		TO-TEST SW	2	1.81	100	100	10	
3R	25	NON FDI TEST INDIC	1	2.05	100		10	CP
			2	2.11	100		10	P
			3	2.58	100		10	
3R	26	MON GLIDE SLOPE	1	2.05	100		10	
		FLAG OUT OF VIEW ON	2	2.11	100		10	
		FDI	3	2.58	100		10	
3R	27	MON GLIDE SLOPE FLAG	1	2.05	100		10	
		IN VIEW ON ADI	2	2.11	100		10	
			3	2.58	100		10	
3R	28	MON GYRO FLAG IN	1	2.05	100		10	
		VIEW ON FDI	2	2.11	100		10	
			3	2.58	100		10	
3R	29	MON GYRO FLAG OUT OF	1	2.05	100		10	
		VIEW ON FDI	2	2.11	100		10	
			3	2.58	100		10	
3R	30	MON GLIDE SLOPE	1	2.05	100		10	
		ATTITUDE INDIC ON	2	2.11	100		10	
		FDI	3	2.58	100		10	
3R	31	MON A/C ATTITUDE	1	2.58	100		10	
		ON FDI	2	2.05	100		10	
			3	2.11	100		10	
			4	10	10		10	
3R	32	SET PITCH TRIM CONT	1	2.71	100	100	10	CP
		ON FDI					10	
3R	33	MON RADIO ALT INDIC	1	2.05	100		10	
		ON FDI	2	2.11	100		10	
			3	2.58	100		10	
3R	34	MON RATE OF TURN	1	2.05	100		10	
		INDIC ON FDI	2	2.11	100		10	
			3	2.58	100		10	
3R	35	MON SPEED POINTER	1	2.05	100		10	
		AND COMMAND INDIC	2	2.11	100		10	
			3	2.58	100		10	
3R	40	MON FD VERT SPD TAPE	1	2.01	100		10	
3R	41	SET FD PITCH MODE	1	2.92	100	100	10	P
		SEL TO ALT HOLD					10	P
3R	42	SET FD PITCH MODE	1	2.92	100	100	10	P
		SEL TO VERT SPEED					10	
		MODE AND ADJUST VERT					10	
		SPEED					10	
3R	43	SET FD MODE SEL TO	1	2.01	100	100	10	
		OFF					10	
3R	44	SET FD MODE SEL TO	1	2.01	100	100	10	
		HDG					10	
3R	45	SET FD MODE SEL TO	1	2.01	100	100	10	
		RAD					10	
3R	46	SET FD MODE SEL TO	1	2.01	100	100	10	
		BB					10	
3R	47	CHECK THAT F.D. MODE	1	1.01	100		10	P
		SEL SW SET TO OFF					10	

3R	48	CHECK THAT F.D. PITCH CONT SET TO FULL CLOCKWISE	1	2.25	100		10	CP
			2	.98	100		10	
3R	49	SET VHF/NAV SW TO NORMAL	1	2.53	100	100	10	P
							10	
3R	50	SET VHF/NAV SW TO NO.1	1	2.53	100	100	10	
							10	
3R	51	SET VHF/NAV SW TO NO.2	1	2.53	100	100	10	
							10	
3R	52	SET VERT GYRO SEL SW TO NO.1	1	1.46	100	100	10	P
			2	2.15	100	100	10	
3R	53	SET VERT GYRO SEL SW TO NO.2	1	1.46	100	100	10	P
			2	2.15	100	100	10	
3R	54	SET COMPUTER SEL SW TO NO.1	1	1.85	100	100	10	P
			2	2.14	100	100	10	
			3	2.55	100	100	10	
3R	55	SET COMPUTER SEL SW TO NO.2	1	1.85	100	100	10	P
			2	2.14	100	100	10	
			3	2.55	100	100	10	
3R	56	MON PITCH ATTITUDE INDIC ON FDI	1	5	10		10	
			2	30	10		10	
			3	60	10		10	
			4	90	10		10	
3R	57	MON PITCH ATTITUDE INDIC ON FDI	1	120	10		10	3R
			2	285	10		10	
			3	20	10		10	
3R	58	MON A/C ATTITUDE RELATIVE TO ROLL COMMAND ON FDI	1	10	10		10	
			2	285	10		10	
							10	
3R	59	MON INITIAL MOVEMENT OF ROLL COMMAND BAR ON FDI	1	2.58	50		10	
							10	
							10	
3R	60	MON INITIAL MOVEMENT OF GLIDE SLOPE COMMAND BAR ON FDI	1	2.58	50		10	
							10	
							10	
3R	61	MON INDICATION OF DEVIATION FROM LOCALIZE AND GLIDE SLOPE ON FDI	1	180	50		10	
			2	5	50		10	
3R	62	MONITOR LOCALIZER INDICATOR ON FDI	1	5	20		20	
			2	10	20		20	
			3	30	20		20	
			4	60	20		20	
3R	63	MON GLIDE SLOPE ATT INDIC ON FDI	1	5	20		20	
			2	10	20		20	
			3	30	20		20	
			4	60	20		20	
3R	64	MON COMMAND BAR ATTITUDE INDIC ON FDI	1	5	20		10	
			2	10	20		10	
			3	30	20		10	
			4	60	20		10	
3R	65	MON COMMAND BAR ATTITUDE INDIC ON FDI	1	90	20		10	
			2	120	20		10	
			3	300	20		10	
			4		20		10	
3S	01	MONITOR A/C HEADING RELATIVE TO SELECTED HDG ON CI	1	2.23	100		10	
			2	10	10		10	
			3	5	10		10	
			4	30	10		10	

3S	02	MON COMPASS FLAG	1	2.23	100		10	
		IN VIEW ON CI	2	.78	100		10	
3S	03	MON COMPASS FLAG OUT	1	2.23	100		10	
		OF VIEW ON CI	2	.78	100		10	
3S	04	MON A/C POSITION	1	2.10	100		10	
		RELATIVE TO SELECTED	2	5.00	100		10	
		COURSE ON CI	3	10	10		10	
			4	240	10		10	
3S	05	MON COURSE PNTR IND	1	2.10	100		10	
		ON CI	2	2.23	100		10	
3S	06	MON L-C WARNING FLAG	1	2.23	100		10	
		IN VIEW ON CI	2	.78	100		10	
3S	07	MON L-C WARNING FLAG	1	2.23	100		10	
		OUT OF VIEW ON CI	2	.78	100		10	
3S	08	MON COURSE DIGITAL	1	2.23	90		10	
		INDIC ON CI	2	.78	90		10	
3S	09	MON GLIDE SLOPE FLAG	1	2.23	100		10	
		IN VIEW ON CI	2	.78	100		10	
3S	10	MON GLIDE SLOPE FLAG	1	2.23	100		10	
		OUT OF VIEW ON CI	2	.78	100		10	
3S	11	SET COURSE DIGITS	1	4.92	10	100	10	
		AND POINTER ON CI	2	2.87	10	100	10	
		USING COURSE CURSOR	3	2.87	10	100	10	
		CONT					10	
3S	12	SET HEADING CURSOR	1	5	50	100	10	
		ON CI USING HDG CUR-	2	4.13	50	100	10	
		SOR CONT	3	2.55	50	100	10	
			4	2.14	50	100	10	
3S	13	MON DEVIATION FROM	1	.78	100		10	
		GLIDE SCOPE ON CI	2	2.23	100		10	
3S	14	MON COMPASS HDG IND	1	.78	100		10	
		ON CI	2	2.23	100		10	
3S	15	MONITOR A/C HEADING	1	60	10		10	
		RELATIVE TO SELECTED	2	90	10		10	
		HEADING ON CI	3	120	10		10	
			4	20	10		10	
3S	16	MON INDIC THAT A/C	1	2.23	10		10	
		ABEAM OF MARKER AND					10	
		ON HEADING					10	
3S	17	MON A/C HEADING	1	30	10		10	
		RELATIVE TO SELECTED	2	90	10		10	
		COURSE ON CI	3	180	10		10	
			4	285	10		10	
3S	18	SET COMPASS SEL SW	1	2.15	100	100	10	
		TO NO.1					10	
3S	19	SET COMPASS SEL SW	1	2.15	100	100	10	
		TO NO.2					10	
3S	20	MON INDIC OF MARKER	1	2.23	100		10	
		FLY OVER ON CI					10	
3S	21	MON A/C HEADING	1	300	10		10	
		RELATIVE TO SELECTED						
		COURSE ON CI						
3U	01	MON TOTAL AIR TEMP	1	2.25	100		10	CP
		INDIC	2	2.29	100		10	CP
			3	1.17	100		10	CP
			4	2.18	100		10	AC
3V	01	MON GO AROUND ANNUN	1	1.21	100		10	CP
		LT ON	2	.92	100		10	P
3V	02	MON GO AROUND ANNUN	1	1.21	100		10	
		LT OFF	2	.92	100		10	

3S

3V	03	MON ALT HOLD ANNUN	1	1.21	100		10	
		LT ON	2	.92	100		10	
3V	04	MON ALT HOLD ANNUN	1	1.21	100		10	
		LT OFF	2	.92	100		10	
3V	05	MON VOR LOC ANNUN	1	1.21	100		10	
		LT OFF	2	.92	100		10	
3V	06	MON LOC ANNUN	1	1.21	100		10	
		LT GREEN	2	.92	100		10	
3V	08	MON GLIDE SLOPE	1	1.21	100		10	
		ANNUN LT AMBER	2	.92	100		10	
3V	09	MON GLIDE SLOPE	1	1.21	50		10	
		ANNUN LT GREEN	2	.92	50		10	
3V	10	MON GLIDE SLOPE	1	1.21	100		10	
		ANNUN LT OFF	2	.92	100		10	
3V	11	MONITOR OUTER MARKER	1	1.91	25		10	100 CP
		LT ON AND AUDIBLE	2	.72	25		10	
		SIGNAL					10	
3V	12	MON OUTER MARKER LT	1	1.91	25		10	100
		OFF AND AUDIBLE SIG	2	.72	25		10	
		SILENT					10	
3V	13	MONITOR MIDDLE	1	1.91	25		10	100
		MARKER ANNUN LT ON	2	.72	25		10	
		AND AUDIBLE SIGNAL					10	
3V	14	MON MIDDLE MARKER	1	1.91	25		10	100
		ANNUN LT OFF AND	2	.72	25		10	
		AUDIBLE SIG SILENT					10	
3V	15	MON AIRWAYS MKR	1	1.91	25		10	100
		ANNUN LT FLASHING	2	.72	25		10	100 P
		AND INTRMT AUDIBLE					10	
		SIGNAL					10	
3V	16	MON AIRWAYS MKR	1	1.91	100		10	100
		ANNUN LT ON STEADY	2	.72	100		10	100
		AND STEADY AUDIBLE					10	
		SIGNAL					10	
3V	17	MON AIRWAYS MKR	1	1.91	100		10	100
		ANNUN LT OFF AND	2	.72	100		10	100
		AUDIBLE SIG SILENT					10	
3V	18	SET MARKER SW TO LO	1	2.07	100	100	10	
3V	19	SET MKR SW TO HI	1	2.07	100	100	10	
3V	20	MON WINGS LEVEL LT	1	1.21	100		10	
		ON GREEN	2	.92	100		10	
3V	21	MON WINGS LEVEL LT	1	1.21	100		10	
		OFF	2	.92	100		10	
3V	22	MON BACK BEAM LT ON	1	1.21	100		10	
		GREEN	2	.92	100		10	
3V	23	MON BACK BEAM LT OFF	1	1.21	100		10	
			2	.92	100		10	
3V	24	MON HDG ON GREEN	1	1.21	100		10	
			2	.92	100		10	
3V	25	MON HDG LT OFF	1	1.21	100		10	
			2	.92	100		10	
3V	26	SET NO.2 COMM RECVR	1	2.43	100	100	10	CP
		MKR SW TO ON	2	1.43	100	100	10	P
3V	27	SET NO.2 COMM RECVR	1	2.43	100	100	10	
		MKR SW TO OFF	2	1.43	100	100	10	
3W	01	MON INST COMP POWER	1	2.32	100		10	P
		LT ON					10	
3W	02	MON INST COMP POWER	1	2.32	100		10	
		LT OFF					10	
3W	03	MON INST COMP VERT	1	2.32	100		10	

		GYRO LT ON					10	
3W	04	MON INST COMP VERT	1	2.32	100		10	
		GYRO LT OFF					10	
3W	05	MON INST COMP G/S	1	2.32	100		10	
		LT ON					10	
3W	06	MON INST COMP G/S	1	2.32	100		10	
		LT OFF					10	
3W	07	MON INST COMP LOC	1	2.32	100		10	
		LT ON					10	
3W	08	MON INST COMP LOC	1	2.32	100		10	
		LT OFF					10	
3W	09	MON NAV WARNING LT	1	.93	100		10	
		ON	2	.68	100		10	CP
			3	1.56	100		10	P
3W	10	MON NAV WARNING LT	1	.93	100		10	CP
		OFF	2	.68	100		10	
			3	1.56	100		10	
3X	01	FOLD STANDBY COMPASS	1	3.5	100	100	10	
		INTO VIEW					10	
3X	02	MON STANDBY COMPASS	1	2.0	100		10	
		HDG INDIC					10	
3X	03	FOLD STANDBY COMPASS	1	1.5	100	100	10	
		OUT OF VIEW					10	
4A	01	SET FLT COUNT SYS A	1	3.33	100	100	10	
		SW TO ON					10	P
4A	02	SET FLT CONT SYS A	7	3.33	100	100	10	
		SW TO OFF					10	
4A	03	SET FLT CONT SYS A	1	3.33	100	100	10	
		SW TO STDBY RUD					10	
4A	04	SET FLT CONT SYS B	1	3.33	100	100	10	
		SW TO ON					10	
4A	05	SET FLT CONT SYS B	1	3.33	100	100	10	
		SW TO OFF					10	
4A	06	SET FLT CONT SYS B	1	3.33	100	100	10	
		SW TO STDBY RUD					10	
4A	07	MON FLT CONT SYS A	1	.66	100		10	
		HYD LO PRESS LT ON	2	1.21	100		10	P
			3	.77	100		10	P
4A	08	MON FLT CONT SYS A	1	.66	100		10	CP
		HYD LO PRESS LT OFF	2	1.21	100		10	
			3	.77	100		10	
4A	09	SET SPOILER SYS A	1	2.53	100	100	10	
		SW TO ON					10	P
4A	10	SET SPOILER SYS A	1	2.53	100	100	10	
		SW TO OFF					10	
4A	11	SET SPOILER SYS B	1	2.53	100	100	10	
		SW TO ON					10	
4A	12	SET SPOILER SYS B	1	2.53	100	100	10	
		SW TO OFF					10	
4A	13	SET YAW DAMPER SW	1	2.68	100	100	10	
		TO ON					10	P
4A	14	SET YAW DAMPER SW	1	2.68	100	100	10	
		TO OFF					10	
4A	15	MON FLT CONT STDBY	1	1.26	100		10	
		HDY LO QTY LT ON	2	.53	100		10	P
4A	16	MON FLT CONT STDBY	1	1.26	100		10	
		HYD LO QTY LT OFF	2	.53	100		10	
4A	17	MON FLT CONT STDBY	1	.53	100		10	
		HYD LO PRESS LT ON	2	1.26	100		10	P
4A	18	MON FLT CONT STDBY	1	.53	100		10	

		HYD LO PRESS LT OFF	2	1.26	100				10	
4A	19	MON FEEL DIFF PRESS	1	1.05	100				10	P
		LT ON							10	
4A	20	MON FEEL DIFF PRESS	1	1.05	100				10	
		LT OFF							10	
4A	21	ACTUATE CWS FOR	1	2.0	10	100	100		10	
		ROLL CONT							10	
4A	22	ACTUATE CWS FOR	1	2.0	10	100	100		10	
		PITCH CONT							10	
4A	23	ACTUATE RUDDER PEDAL	1	3	10			100	100	
		FOR HEADING/YAW CONT	2	20					100	4A
4A	24	ACT CWS TO	1	15		100	100		10	
		ROTATE FOR LIFTOFF	2	5		100	100		10	
4A	25	MON MASTER CAUTION	1	.56	100				10	P
4A	26	ACTUATE MASTER CAUT	1	2.14	100	100			10	
		RESET SW	2	2.14	100		100		10	
4A	27	ACTUATE ANNUN PNL	1	1.93	100	100			10	
		RECALL SW	2	2.28	100		100		10	
4A	28	ACT FLT CONTROL TO	1	5		100	10		10	
		CHANGE HDG	2	10		100	10		10	
			3	15		100	10		10	
			4	20		100	10		10	
4A	29	ACT FLT CONTROL TO	1	5		100	30		10	
		CHANGE ALT	2	10		100	30		10	
			3	15		100	30		10	
			4	20		100	30		10	
4A	30	ACT FLT CONT TO	1	5		100	30		10	
		ALIGN A/C WITH ATT	2	10		100	30		10	
		INDICATORS	3	15		100	30		10	
			4	240		100	30		10	
4A	31	MANUALLY CONTROL A/C	1	75		50	10		10	
			2	10		50	10		10	
			3	15		50	10		10	
			4	20		50	10		10	
4A	32	MON FLT CONT	1	.56	100				10	
		ANNUN LT ON							10	
4A	33	MON FLT COUNT ANNUN	1	.56	100				10	
		LT OFF							10	
4A	34	MON MASTER CAUTION	1	.56	100				10	
		AND CVHD ANNUN LTS							10	
		ON							10	
4A	35	MON OVHD ANNUN LT ON	1	.56	100				10	
4A	36	MON OVHD ANNUN LT	1	.56	100				10	
		OFF							10	
4A	38	MON STALL WARNING	1	1.0	100				10	100
		STICK SHAKER							10	
4A	39	SET STALL WARNING	1	3.23	100		100		10	P
		SW TO HTR OFF	2	2.16	100		100		10	P
4A	40	SET STALL WARNING	1	3.23	100		100		10	
		SW TO NORMAL	2	2.16	100		100		10	
4A	41	SET STALL WARNING	1	3.23	100		100		10	
		SW TO TEST	2	2.16	100		100		10	
4A	42	MON STALL WARNING	1	.55	100				10	P
		OFF LT ON	2	.32	100				10	P
4A	43	MON STALL WARNING	1	.55	100				10	
		OFF LT OFF	2	.32	100				10	
4A	44	SET YAW DAMPER TEST	1	2.48	100		100		10	P
		SW TO L							10	
4A	45	SET YAW DAMPER TEST	1	2.48	100		100		10	
		SW TO R							10	

4A	46	ADJUST RUDDER PEDALS 1	3.0	100	100	100	100	100	10	
		FORE AND AFT FOR							10	
		COMFORT							10	
4A	48	CHECK FLIGHT CONT	1	2.79	100				10	P
		SYS A SW SET TO ON							10	
4A	49	CHECK FLIGHT CONT	1	2.02	100				10	P
		SYS B SW SET TO ON							10	
4A	50	CHECK ALT FLAPS SW	1	2.04	100				10	P
		SET TO OFF							10	
4A	51	CHECK SPOILER SYS A	1	2.04	100				10	P
		SW SET TO ON							10	
4A	52	CHECK SPOILER SYS B	1	2.02	100				10	P
		SW SET TO ON							10	
4A	53	CHECK YAW DAMPER SW	1	2.02	100				10	P
		SET TO OFF							10	
4A	54	MON YAW DAMPER LT	1	1.21	100				10	P
		OFF	2						10	
4A	55	MON YAW DAMPER LT ON	1	1.21	100				10	
4A	56	SET STABILIZER BRAKE	1	1.97	100	100			10	CP
			2	3.16	100		100		10	P
4A	57	RELEASE STAB BRAKE	1	1.97	100	100			10	
			2	3.16	100		100		10	
4A	58	MON YAW DAMPER IND	1	2.01	20	80			10	P
4A	59	MON A/P DISENGAGE LT	1	.68	100				10	P
		ON							10	
4A	60	MON ELEV POSITION	1	2.24	100				10	P
		INDIC							10	
4A	61	MON STALL WARNING	1	2.01	100				10	P
		TEST INDIC							10	
4A	62	MON FLT CONT SYS B	1	.66	100				10	
		HYD LO PRESS LT ON	2	1.21	100				10	
4A	63	MON FLT CONT SYS B	1	.66	100				10	
		HYD LO PRESS LT OFF	2	1.21	100				10	
4A	64	MANUALLY CONTROL A/C	1	32		80	30		10	
			2	10		50	10		10	
			3	5		50	10		10	
			4	30		50	10		10	
4A	65	MANUALLY CONTROL A/C	1	60		50	10		10	
			2	300		50	10		10	
			3	120		50	10		10	
			4	90		50	10		10	
4A	66	MANUALLY CONTROL A/C	1	90		100	10		10	
		TO MAKE RIGHT TURN	2	75		100	10		10	
		IN HOLDING PATTERN							10	
4A	67	ROLL OUT TO LEVEL	1	.001					10	
		CONFIGURATION							10	
4A	68	MANUALLY CONT A/C	1	26		100	30		10	
			2	90		50	10		10	
			3	90		10	100		10	
			4	285		50	10		10	
4A	69	ACT FLT CONT TO	1	180		100	30		10	
		ALIGN A/C WITH ATT	2	180		30	100		10	
		INDICATORS	3	30		100	30		10	
			4	60		100	30		10	
4A	70	ADJUST PANEL MOUNTED	1	3	100	100	100		10	
		CONTROLLER HEIGHT							10	
4A	71	ACT FLT CONTROLS TO	1	2		100	30		10	
		CHANGE HDG							10	
4A	72	MANUALLY CONTROL A/C	1	5		10	50		10	
		- COPILOT	2	10		10	50		10	

		3	30	10	50	10
		4	60	10	50	10
4A	73 MANUALLY CONTROL A/C	1	90	10	50	10
	- COPILOT	2	120	10	50	10
		3	240	10	50	10
		4	300	10	50	10
4A	74 ACTUATE CONTROLS TO	1	5	10	50	10
	CHANGE HEADING	2	10	10	100	10
		3	15	10	100	10
		4	20	10	100	10
4A	75 CONTROL A/C ON FINAL	1	5	10	100	10
	APPROACH	2	10	10	100	10
		3	15	10	100	10
		4	245	10	100	10
4A	76 STABILIZE CNTRL COL	1	2.5	100	50	10
		2	2.5	50	100	10
4A	77 TRIM STAB MANUALLY	1	2.5		50	10
		2	2.5	50		10
4A	78 ACT FLT CONT TO	1	30	30	100	10
	ALIGN A/C WITH ATT	2	60	30	100	10
	INDICATORS FD+CI					
4B	01 ACTUATE ENG NO.1	1	2.34		100	10
	THROTTLE	2	2.82		100	10
		3	2.44		100	10
		4	2.51		100	10
4B	02 ACTUATE ENG NO.2	1	2.34		100	10
	THROTTLE	2	2.42		100	10
		3	2.44		100	10
		4	2.51		100	10
4B	03 ACTUATE BOTH	1	2.34		100	10
	THROTTLES	2	2.82		50	10
		3	2.44		100	10
		4	2.51		100	10
4B	04 CHECK THAT THRUST	1	2.54	100		10
	LEVERS IN CLOSED POS					10
4B	05 ADVANCE THRUST LVRS	1	3.15		100	10
	TO NEAR VERTICAL POS					10
4B	06 ADVANCE THRUST LVRS	1	2.44		100	10
	TO TAKEOFF THRUST					10
4B	07 MAKE MINOR THRUST	1	2.73	100		10
	ADJUSTMENT	2	2.73		100	10
4B	08 SET THRUST LEVERS TO	1	2.50		100	10
	IDLE	2	2.50	100		10
4C	01 SET THRUST REVERSER	1	2.74		100	100
	LEVERS TO ON	2	21		100	10
		3	21	100		10
4C	02 SET THRUST REVERSER	1	2.76		100	10
	LEVERS TO OFF	2	2.76	100		10
4C	03 MON ENG NO 1 REVER-	1	.76	100		10
	SER UNLOCKED LT ON	2	.54	100		10
4C	04 MON ENG NO 1 REVER-	1	.55	100		10
	SER UNLOCKED LT OFF	2	.76	100		10
4C	05 MON ENG NO 2 REVER-	1	.76	100		10
	SER UNLOCKED LT ON	2	.54	100		10
4C	06 MON ENG NO 2 REVER-	1	.55	100		10
	SER UNLOCKED LT OFF	2	.76	100		10
4C	07 MON REVERSER ISOLA-	1	.76	100		10
	TION VALVE LT ON					10
4C	08 MON REVERSER ISOLA-	1	.76	100		10
	TION VALVE LT OFF					10

P
P
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AP
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4C

4C	09	MON MASTER CAUTION AND OVRHD ANNUN LTS ON	1	.73	100		10	
4C	10	PRESS MASTER CAUTION RESET SW	1	2.13	100	100	10	
4C	11	MON OVRHD CAUTION LT ON	1	.54	100	100	10	
4C	12	MON OVRHD CAUTION LT OFF	1	.54	100		10	
4C	13	PRESS ANNUN PNL RECALL SW	1	2.13	100	100	10	
4C	14	SET ENG NO.1 THRUST REVERSER OVERRIDE SW TO NORMAL	1	3.29	100	100	10	P
4C	15	SET ENG NO.1 THRUST REVERSE OVERRIDE SW TO OVERRIDE	1	3.29	100	100	10	
4C	16	SET ENG NO.2 THRUST REVERSER OVERRIDE SW TO NORMAL	1	1.91	100	100	10	P
4C	17	SET ENG NO.2 THRUST REVERSER OVERRIDE SW TO OVERRIDE	1	1.91	100	100	10	
4C	18	MON THRUST REVERSER ARMED LT ON	1	.53	100		10	P
4C	19	MON THRUST REVERSER ARMED LT OFF	1	.53	100		10	
4C	20	MON THRUST REVERSER LO PRESS LT ON	1	1.30	100		10	P
4C	21	MON THRUST REVERSER LO PRESS LT OFF	1	1.30	100		10	
4C	22	MON THRUST REVERSER OVERRIDE SW=S IN NORMAL	1	2.18	100	100	10	
4C	23	CHECK THAT REV THRST LEVERS SET TO OFF	1	1.20	100		10	P
4D	01	SET LNDG GEAR LVR TO UP POSITION	1	3.06	50	100	10	C
			2	3.27	50	100	10	CP
			3	2.53	50	100	10	
4D	02	SET LANDING GEAR LVR TO OFF POSITION	1	3.06	100	100	10	
			2	3.27	100	100	10	
			3	2.53	100	100	10	
4D	03	SET LANDING GEAR LEVER TO DOWN POSITION	1	4	25	100	10	
			2	2.53	25	100	10	C
			3	3.27	25	100	10	
			4	3.06	25	100	10	
4D	04	MONITOR LANDING GEAR LEVER POSITION	1	2.09	100		10	P
4D	05	MONITOR NOSE GEAR DOWN AND LOCKED LT ON	1	2.00	100		10	
			2	.54	100		10	
			3	.72	100		10	
4D	06	MONITOR NOSE GEAR DOWN AND LOCKED LT OFF	1	.54	100		10	C
			2	.72	100		10	CP
4D	07	MONITOR NOSE GEAR UNLOCKED LT ON	1	.54	100		10	
			2	.72	100		10	
4D	08	MON NOSE GEAR UNLOCKED LT OFF	1	.54	100		10	
			2	.72	100		10	
4D	09	MONITOR LEFT/RT GEAR DOWN AND LOCKED LT	1	2.00	100		10	
			2	.72	100		10	

		ON	3	.54	100				10
4D	10	MON LEFT/RT GEAR	1	.54	100				10
		DOWN AND LOCKED LT	2	.72	100				10
		OFF							10
4D	11	MON LEFT/RT GEAR	1	.54	100				10
		UNLOCKED LT ON	2	.72	100				10
4D	12	MON LEFT/RT GEAR	1	.54	100				10
		UNLOCKED LT OFF	2	.72	100				10
4D	13	ACTUATE LANDING GEAR							10
		LEVER OVERRIDE							10
		TRIGGER							10
4D	14	OPEN MANUAL GEAR	1	3.5	100	100			10
		HANDLE RELEASE							10
		ACCESS COVER							10
4D	15	CLOSE MANUAL GEAR	1	3.0	50	100			10
		HANDLE RELEASE							10
		ACCESS COVER							10
4D	16	ACTUATE RIGHT MAIN	1	.7	50	100			10
		GEAR RELEASE HANDLE							10
4D	17	ACTUATE NOSE GEAR	1	.7	50	100			10
		RELEASE HANDLE							10
4D	18	ACTUATE LEFT MAIN	1	.7	50	100			10
		GEAR RELEASE HANDLE							10
4D	19	OPEN NOSE GEAR							10
		VIEWING PORT							10
4D	20	CLOSE NOSE GEAR							10
		VIEWING PORT							10
4D	21	INSPECT NOSE GEAR							10
		LOCKED INDIC MARK							10
4D	22	OPEN MAIN GEAR							10
		VIEWING PORT							10
4D	23	CLOSE MAIN GEAR							10
		VIEWING PORT							10
4D	24	INSPECT MAIN GEAR							10
		LOCKED INDIC MARKS							10
4D	27	PULL PARKING BRAKE	1	3.14	80	100			10
		LEVER	2	3.06	80	100			10
			3	4	100	100			10
4D	28	ACTUATE BRAKES	1	1.50			100	100	10
		USING RUDDER PEDALS	2	10			100	100	10
			3	30			100	100	10
4D	29	MON PARKING BRAKE	1	9999					10
		WARNING LT ON	2	92	100				10
			3	.25	100				10
			4	.54	100				10
4D	30	MON PARKING BRAKE	1						10
		WARNING LT OFF	2	92	100				10
			3	.25	100				10
			4	.54	100				10
4D	31	MON LANDING GEAR							10
		NOT DOWN AND LOCKED							100
		WARNING HORN							10
4D	32	ACTUATE LANDING GEAR	1	2.16	100	100			10
		WARNING CUTOUT SW							10
4D	33	SET INBD ANTI-SKID	1	2.18	100	100			10
		SW TO ON	2	1.68	100	100			10
4D	34	SET INBD ANTI-SKID	1	2.18	100	100			10
		SW TO OFF	2	1.68	100	100			10
4D	35	SET OUTBD ANTI-SKID	1	2.18	100	100			10
		SW TO ON	2	1.68	100	100			10

P

CP

CP

CP

4D	36	SET OUTBD ANTI-SKID	1	2.18	100	100			10	
		SW TO OFF	2	1.68	100	100			10	
4D	37	MON ANTI-SKID INOP	1	.54	100				10	CP
		LT ON							10	
4D	38	MON ANTI-SKID INOP	1	.54	100				10	
		LT OFF							10	
4D	39	MON AUTO BRAKE INOP	1	.54	100				10	
		LT ON							10	
4D	40	MON AUTO BRAKE INOP	1	.26	100				10	CP
		LT OFF							10	
4D	41	SET AUTO BRAKE SEL	1	2.62	100	100			10	CP
		SW TO OFF	2	2.62	100		100		10	
4D	42	SET AUTO BRAKE SEL	1	2.62	100	100			10	
		SW TO MIN							10	
4D	43	SET AUTO BRAKE SEL	1	2.62	100	100			10	
		SW TO MED							10	
4D	44	SET AUTO BRAKE SEL	1	2.62	100	100			10	
		SW TO MAX							10	
4D	46	ACTUATE LANDING GEAR	1	2.16	100	100			10	CP
		WARNING HORN CUTOUT							10	
		SW							10	
4D	47	CHECK LANDING GEAR	1	.90	100				10	
		LEVER IN DOWN POS.							10	
4D	48	CHECK THAT ANTI-SKID	1	1.04	100				10	P
		CONT SW GUARDS ARE							10	
		DOWN							10	
4D	49	CHECK AUTO BRAKE SEL	1	1.08	100				10	P
		SW SET TO OFF							10	
4D	50	CHECK THAT PARKING	1	.97	100				10	P
		BRAKES ARE SET							10	
4D	51	SET PARKING BRAKE	1	2	100		100		10	
		LEVER TO OFF POS	2	3	100	100			10	
4D	52	RELEASE BRAKES	1	1.00				100 100	10	
4D	53	SET GEAR SEAL SW TO	1	2.48	100	100			10	CP
		OFF							10	
4D	54	SET GEAR SEAL SW TO	1	2.48	100	100			10	
		NORMAL							10	
4D	55	MON GEAR SEAL LT ON	1	1	100				10	
4D	56	MON GEAR SEAL LT OFF	1	.55	100				10	
4E	01	SET ALT FLAPS MASTER	1	2.01	100		100		10	P
		SW TO ARM	2	1.70	100		100		10	P
4E	02	SET ALT FLAPS MASTER	1	2.01	100		100		10	
		SW TO OFF	2	1.70	100		100		10	
4E	03	SET ALT FLAPS SW TO	1	2.01	100		100		10	
		UP	2	1.70	100		100		10	
4E	04	SET ALT FLAPS SW TO	1	2.01	100		100		10	
		OFF	2	1.70	100		100		10	
4E	05	SET ALT FLAPS SW TO	1	2.01	100		100		10	
		DOWN	2	1.70	100		100		10	
			3						10	
4E	06	SET FLAP CONT LEVER	1	1.98	50	100			10	C
		TO FLAPS 0	2	2.22	50	100			10	C
			3	2.69	50	100			10	CP
4E	07	SET FLAP CONT LEVER	1	2.69	20	100			10	CP
		TO FLAPS 1							10	
4E	08	SET FLAP CONT LEVER	1	2.02	50	100			10	C
		TO FLAPS 2	2	2.69	50	100			10	CP
4E	09	SET FLAP CONT LEVER	1	4	50	100			10	
		TO FLAPS 5	2	1.93	50	100			10	C
			3	2.69	50	100			10	CP

4E	10	SET FLAP CONT LEVER	1	1.99	50	100	10	C
		TO FLAPS 10	2	2.89	50	100	10	CP
4E	11	SET FLAP CONT LEVER	1	.4	20	100	10	C
		TO FLAPS 15	2	4.24	20	100	10	C
			3	2.46	20	100	10	CP
			4	2.89	20	100	10	CP
4E	12	SET FLAP CONT LEVER	1	2.90	50	100	10	
		TO FLAPS 25					10	
4E	13	SET FLAP CONT LEVER	1	2.91	50	100	10	CP
		TO FLAPS 30					10	
4E	14	SET FLAP CONT LEVER	1	2.92	20	100	10	CP
		TO FLAPS 40					10	
4E	15	MONITOR FLAP	1	2.02	50		10	C
		POSITION INDICATOR	2	.4	50		10	
			3	2.23	50		10	C
			4	.97	50		10	C
4E	16	CHECK FLAP LEVER AND	1	2.50	100		10	
		POSITION INDIC AGREE					10	
4E	17	MON FLAP LEVER POS	1	1.24	50		10	P
4F	01	SET SPD BRAKE LEVER	1	2.61	10	100	10	P
		TO DOWN	2	2.99	10	100	10	
			3	3.26	10	100	10	
			4	2.81	10	100	10	P
4F	02	SET SPEED BRAKE	1	.4	10	100	10	
		LEVER TO ARM	2	.4	10	100	10	
			3	3.26	10	100	10	P
			4	2.81	10	100	10	
4F	03	SET SPEED BRAKE	1	2.99	25	100	10	P
		LEVER TO FLT DETENT	2	2.61	25	100	10	
			3	3.26	25	100	10	
			4	2.81	25	100	10	
4F	04	SET SPEED BRAKE	1	2.61	25	100	10	
		LEVER TO UP	2	2.99	25	100	10	
			3	3.26	25	100	10	
			4	2.81	25	100	10	
4F	05	MON SPD BRAKE DO	1	.73	100		10	
		NOT ARM LT ON	2	.83	100		10	
			3	.35	100		10	P
4F	06	MON SPD BRAKE DO	1	.73	100		10	
		NOT ARM LT OFF	2	.83	100		10	
			3	.35	100		10	
4F	07	MONITOR SPEED BRAKE	1	.2	100		10	
		LEVER ARMED LT	2	.73	100		10	P
		GREEN	3	.83	100		10	CP
			4	.35	100		10	P
4F	08	MON SPD BRAKE LEVER	1	.73	100		10	
		ARMED LT OFF	2	.83	100		10	
			3	.35	100		10	
4F	09	ACTUATE SPEED BRAKE	1	2.09	100	100	10	P
		1 TEST SW	2	1.35	100	100	10	P
4F	10	ACTUATE SPEED BRAKE	1	2.09	100	100	10	
		2 TEST SW	2	1.35	100	100	10	
			3	1.44	100	100	10	P
4F	11	ACTUATE SPEED BRAKE	1	2.09	100	100	10	
		3 TEST SW	2	1.35	100	100	10	
			3	1.47	100	100	10	P
4F	12	MON SPD BRK LEVER IN	1	2.0	100		10	
		DOWN AND DETENT POS.					10	
4G	01	ADJUST AILERON	1	4.04		100	10	
		TRIM WHEEL					10	

4M	03	ACTUATE NOSE GEAR	4	68			100	100	10	
		STEERING USING	1	45			100	100	10	
		RUDDER PEDALS	2	100			100	100	10	
			3	90			100	100	10	
			4	10			100	100	10	
4M	04	ACTUATE NOSE GEAR	1	140			100	100	10	
		STEERING USING	2	35			100	100	10	
		RUDDER PEDALS	3	75			100	100	10	
			4	58			100	100	10	
4M	05	ACTUATE NOSE GEAR	1	15		100			10	
		STEERING WHEEL							10	
4N	01	MONITOR LEADING EDGE	1	2	100				10	
		DEVICE POSITION	2	2.34	100				10	AC
		INDICATOR LTS	3	2.24	100				10	C
			4	2.81	100				10	P
4N	02	ACTUATE LEADING EDGE	1	2.05	100		100		10	P
		DEVICE ANNUN PNL	2	1.52	100		100		10	P
		TEST SW	3	1.82	100	100			10	AC
4N	03	MON LE FLAPS-IN-	1	.54	100				10	C
		TRANSIT LT ON	2	1.17	100				10	P
4N	04	MON LE FLAPS-IN-	1	.54	100				10	C
		TRANSIT LT OFF	2	1.17	100				10	
4N	05	MON LE FLAPS EXT	1	.54	100				10	C
		LT ON	2	1.17	100				10	
4N	06	MON LE FLAPS EXT	1	.54	100				10	C
		LT OFF	2	1.17	100				10	
5D	01	MONITOR ADF NO 1	1	.77	90				10	P
		FREQ INDIC	2	1.98	90				10	
			3	2.86	90				10	
5D	02	SELECT ADF NO 1 FREQ	1	2.86	10		100		10	P
		INDIC	2	1.98	10		100		10	P7
			3	1.98	10	100			10	
5D	03	SET ADF NO 1 FUNC	1	1.85	100	100			10	C
		SEL SW TO OFF	2	2.06	100		100		10	
			3	1.93	100		100		10	P
5D	04	SET ADF NO 1 FUNC	1	1.85	100	100			10	
		SEL SW TO ANT	2	2.06	100		100		10	
			3	1.93	100		100		10	
5D	05	SET ADF NO 1 FUNC	1	1.85	100	100			10	
		SEL SW TO ADF	2	2.06	100		100		10	
			3	1.93	100		100		10	
			4	2.20	100	100			10	
5D	06	ADJUST ADF NO 1 GAIN	1	1.93	100		100		10	P
5D	08	SET COMM 2 FILTER	1	2.00	100		100		10	P
		SEL SW TO VOICE							10	
5D	09	SET COMM 2 FILTER	1	2.00	100		100		10	
		SEL SW TO BOTH							10	
5D	10	SET COMM 2 FILTER	1	2.00	100		100		10	
		SEL SW TO RANGE							10	
5D	11	MON ADF 1 AUDIO VIA							10	
		LOUDSPEAKER							10	
5D	12	MON ADF 1 AUDIO VIA							10	
		HEADSET							10	
5D	13	ACTUATE COMM 2 ADF-1	1	1.43	100		100		10	P
		COMM RECVR SW	2	2.46	100		100		10	P
			3	2.44	100	100			10	CP
5D	14	ADJUST ADF NO 1 COMM	1	1.96	10		100		10	P
		RECVR VOL							10	
5D	15	SET ADF NO.1 FUNC	1	1.85	100	100			10	C
		SEL SW TO LOOP	2	2.06	100		100		10	

									10	
		TO ON							10	
5E	15	SET ADF NO.2 BFO SW	1	1.42	100	100			10	
		TO OFF							10	
5E	16	ADJUST ADF NO.2 LOOP	1	2.85	100	100			10	CP
		CONT							10	
5E	17	SEL ADF NO.2 FREQ	1	2.80	20	100			10	CP
		BAND .19-.40	2	2.69	20	100			10	CP
5E	18	SEL ADF NO.2 FREQ	1	2.80	20	100			10	
		BAND .40-.84	2	2.69	20	100			10	
5E	19	SEL ADF NO.2 FREQ	1	2.80	20	100			10	
		BAND .84-1.75	2	2.69	20	100			10	
5E	20	MON ADF NO.2 TUNING	1	2.26	100				10	CP
		METER INDIC							10	
5E	21	MON ADF/RMI 2 INDIC	1	2.26	100				10	
		FOR COMPASS HDG							10	
5E	22	MON ADF/RMI 2 SYNC	1	2.26	100				10	
		ANNUN							10	
5E	23	ADJUST ADF/RMI 2	1	2.68	100	100			10	CP
		SYNC SEL							10	
5E	24	MON ADF/RMI 2 COM-	1	2.26	100				10	
		PASS FLAG IN VIEW							10	
5E	25	MON ADF/RMI 2 COM-	1	2.26	100				10	
		PASS FLAG OUT OF							10	
		VIEW							10	
5E	26	MON ADF NO.1 POINTER	1	2.26	100				10	
		ON ADF/RMI 2 INDIC	2	2	10				10	
5E	27	MON ADF NO.2 POINTER	1	2.26	100				10	
		ON ADF/RMI 2 INDIC	2	2	10				10	
5G	01	SET VOR/RMI COMPASS	1	2.15	100	100			10	P
		SEL SW TO NO.2 NORM							10	
5G	02	SET VOR/RMI COMPASS	1	2.15	100	100			10	
		SEL SW TO NO.1							10	
5G	03	MON COMPASS HDG ON	1	2.25	100				10	P
		VOR/RMI 1 INDIC							10	
5G	04	MON VOR POINTER NO.1	1	2.25	100				10	
		ON VOR/RMI 1 INDIC	2	2	10				10	
5G	05	MON VOR POINTER NO.2	1	2.25	50				10	
		ON VOR/RMI 1 INDIC	2	2	10				10	
5G	06	SET COMPASS SEL SW	1	1.46	50	100			10	P
		TO NO.1							10	
5G	07	SET COMPASS SEL SW	1	1.46	100	100			10	
		TO NO.2							10	
5H	01	MON COMPASS HDG ON	1	2.27	100				10	CP
		VOR/RMI 2 INDIC	2	2.03	100				10	CP
5H	02	MON VOR POINTER NO.1	1	2.27	100				10	
		ON VOR/RMI 2 INDIC	2	2.03	100				10	
			3	2	10				10	
5H	03	MON VOR POINTER NO.2	1	2.27	100				10	
		ON VOR/RMI 2 INDIC	2	2.03	100				10	
			3	2	10				10	
5K	01	FOLD MAG COMPASS	1	3.50	100	100			10	
		INTO VIEW							10	
5K	02	MON MAG COMPASS	1	1.50	100				10	
		HEADING INDIC							10	
5K	03	FOLD MAG COMPASS	1	3.50	100	100			10	
		OUT OF VIEW	2	1.75	100	100			10	
5P	01	MONITOR RANGE INDIC	1	1.04	100				10	CP
		ON DME RNG NO 1	2	.96	100				10	
			3	1.16	100				10	
			4	.80	100				10	

5Q	01 MON RANGE INDIC ON DME RNG NO 2	1 1.03 2 .96 3 1.16 4 .80	100 100 100 100	10 10 10 10	CP
5U	01 MON NAV-1 FREQ INDIC	1 .76 2 4.97 3 5.08	100 90 90	10 10 10	CP P
5U	02 SET NAV-1 FREQ - WHOLE NO.S	1 2.89 2 2.08 3 3.00 4 2.08	10 10 10 100 10 100	100 100 10 10	CP
5U	03 SET NAV-1 FREQ - FRACTIONS	1 2.08 2 2.08	10 10 100	100 10	CP
5U	04 ADJUST NAV-1 VOLUME	1 2.08 2 2.20	10 10 100	100 10	
5U	05 ACT NAV-1 UP/LT TEST SW	1 2.24	10	100	P
5U	06 ACT NAV-1 DN/RT TEST SW	1 1.97	10	100	P
5U	07 ACT NAV-1 VOR TEST SW	1 2.26 2 2.35	10 10 100	100 10	P
5U	08 ACT NAV-1 DME TEST SW	1 1.97 2 2.34 3 2.20	10 10 100 10	100 10 10	CP CP CP
5U	09 SET COMM 2 FILTER SEL SW TO VOICE	1 2.00	100	100	P
5U	10 SET COMM 2 FILTER SEL SW TO BOTH	1 2.00	100	100	
5U	11 SET COMM 2 FILTER SEL SW TO RANGE	1 2.00 2 2.00	100 100 100	100 10	
5U	12 SET COMM 2 NAV-1 NAV RCVR SW TO ON	1 2.46 2 2.44 3 1.39 4 2.26	100 100 100 100 100 100	100 100 10 10	
5U	13 SET COMM 2 NAV-1 NAV RCVR SW TO OFF	1 2.46 2 2.44 3 1.39 4 2.26	100 100 100 100 100 100	100 100 10 10	
5U	14 MON NAV-1 AUDIO				
5V	01 MON NAV-2 FREQ INDIC	1 .76 2 4.71 3 4.91	100 90 90	10 10 10	
5V	02 SET NAV-2 FREQ - WHOLE NO.S	1 2.73 2 2.93 3 2.97	10 10 100 10	100 10 10	C CP P
5V	03 SET NAV-2 FREQ - FRACTIONS	1 1.98 2 1.98 3 2.10	10 10 10	100 100 100	CP
5V	04 ADJUST NAV-2 VOLUME	1 2.18 2 2.93	10 10 100	100 10	P C
5V	05 ACT NAV-2 UP/LT TEST SW	1 1.79	10	100	CP CP
5V	06 ACT NAV-2 DN/RT TEST SW	1 1.97	10	100	CP
5V	07 ACT NAV-2 VOR TEST SW	1 2.28 2 2.34	10 10	100 100	CP P
5V	08 ACT NAV-2 DME TEST SW	1 1.84	10	100	CP
5V	09 SET COMM 2 FILTER SEL SW TO VOICE	1 2.09 2 2.00	100 100	100 100	CP P

			3	2.83	100	100	10	CP
5V	10	SET COMM 2 FILTER	1	2.09	100	100	10	
		SEL SW TO BOTH	2	2.00	100	100	10	
			3	2.83	100	100	10	
5V	11	SET COMM 2 FILTER	1	2.09	100	100	10	
		SEL SW TO RANGE	2	2.00	100	100	10	
			3	2.83	100	100	10	
5V	12	SET COMM 2 NAV-2 NAV	1	2.40	100	100	10	CP
		RECVR SW TO ON	2	1.40	100	100	10	
			3	2.49	100	100	10	P
			4	1.39	100	100	10	
5V	13	SET COMM 2 NAV-2 NAV	1	2.40	100	100	10	
		RECVR SW TO OFF	2	1.40	100	100	10	
			3	2.49	100	100	10	
			4	1.39	100	100	10	
5V	14	MON NAV-2 AUDIO					10	
5W	01	MON NAV-1 FREQ INDIC	1	.76	100		10	AP
			2	4.49	100		10	
			3	3.95	100		10	
5W	02	SET NAV-1 FREQ -	1	2.91		100	10	A
		WHOLE NO.S	2	2.37		100	10	AC
5W	03	SET NAV-1 FREQ -	1	1.58		100	10	
		FRACTIONS	2	1.58		100	10	
5W	04	ADJ NAV-1 VOLUME	1	1.58	10	100	10	
			2	2.91	10	100	10	
			3	1.58	10	100	10	
			4	2.91	10	100	10	
5W	05	SET COMM 1 NAV-1 NAV	1	2.28	100	100	10	A
		RECVR SW TO ON	2	2.40	100	100	10	AC
5W	06	SET COMM 1 NAV-1 NAV	1	2.28	100	100	10	
		RECVR SW TO OFF	2	2.40	100	100	10	
5X	01	MON NAV-2 FREQ INDIC	1	.76	100		10	A
			2	4.57	100		10	
			3	4.53	100		10	
5X	02	SET NAV-2 FREQ -	1	2.89	10	100	10	A
		WHOLE NO.S	2	2.95		100	10	AC
5X	03	SET NAV-2 FREQ -	1	1.58	10	100	10	
		FRACTIONS	2	1.58		100	10	
5X	04	ADJ NAV-2 VOLUME	1	1.58	10	100	10	
			2	2.99	10	100	10	
5X	05	SET COMM 2 NAV-2 NAV	1	2.39	100	100	10	A
		RECVR SW TO ON	2	2.28	100	100	10	AC
5X	06	SET COMM 2 NAV-2 NAV	1	2.39	100	100	10	
		RECVR SW TO OFF	2	2.28	100	100	10	
5Y	01	MON NAV-3 FREQ INDIC	1	.76	100		10	A
			2	4.65	100		10	
			3	4.70	100		10	
5Y	02	SET NAV-3 FREQ-	1	3.07	10	100	10	A
		WHOLE NO.S	2	3.12		100	10	
5Y	03	SET NAV-3 FREQ-	1	1.58	10	100	10	
		FRACTIONS	2	1.58	10	100	10	5Y
5Y	04	ADJ NAV-3 VOLUME	1	3.07	10	100	10	
			2	3.12	10	100	10	
5Y	05	SET COMM 3 NAV-3 NAV	1	2.50	100	100	10	AC
		RECVR SW TO ON					10	
5Y	06	SET COMM 3 NAV-3 NAV	1	2.50	100	100	10	
		RECVR SW TO OFF					10	
6A	01	MON WEATHER RADAR	1	4.11	100		10	
		VIDEO	2	2.39	100		10	P
			3	2.00	100		10	P

6A	02 SEL 30-10 PPI SCALE	1	2.66	80	100	10	
		2	2.18	80	100	10	
		3	2.66	80	100	10	P
6A	03 SEL 80-20 PPI SCALE	1	2.66	80	100	10	
		2	2.18	80	100	10	
6A	04 SEL 180-30 PPI SCALE	1	2.66	80	100	10	
		2	2.18	80	100	10	
6A	05 ADJUST PPI TRACE CON	1	2.21	80	100	10	P
6A	06 ADJUST PPI ERASE	1	2.28	80	100	10	P
	RATE CONT					10	
6A	07 ADJUST PPI DIMMER	1	2.19	80	100	10	
		2	2.14	80	100	10	
6A	08 ADJUST PPI POLARI-					10	P
	ZATION CONT					10	
6A	09 SET W/R FUNC SEL SW	1	2.37	100	100	10	
	TO OFF	2	2.38	100	100	10	CP
6A	10 SET W/R FUNC SEL SW	1	2.37	100	100	10	P
	TO STBY	2	2.38	100	100	10	
6A	11 SET W/R FUNC SEL SW	1	2.37	100	100	10	
	TO NORM	2	2.38	100	100	10	
6A	12 SET W/R FUNC SEL SW	1	2.37	100	100	10	
	TO CTR	2	2.38	100	100	10	
6A	13 SET W/R FUNC SEL SW	1	2.37	100	100	10	
	TO MAP	2	2.38	100	100	10	
6A	14 SET W/R FUNC SEL SW	1	2.37	100	100	10	
	TO TEST	2	2.38	100	100	10	
6A	15 ADJUST W/R GAIN CONT	1	2.17	80	100	10	
		2	2.12	80	100	10	
6A	16 ADJUST W/R ANT TILT	1	2.17	80	100	10	P
	CONT	2	2.02	80	100	10	
6A	17 CHECK W/R OFF	1	2.17	100	100	10	P
7A	01 SET HYD PUMP A NO 1	1	2.75	100	100	10	
	ENG SW TO ON	2	1.46	100	100	10	
		3	2.55	100	100	10	
		4	1.46	100	100	10	CP
7A	02 SET HYD PUMP A NO 1	1	1.95	100	100	10	
	ENG SW TO OFF	2	1.46	100	100	10	
		3	1.46	100	100	10	
		4	2.75	100	100	10	
7A	03 SET HYD PUMP A NO 2	1	1.95	100	100	10	
	ENG SW TO ON	2	1.46	100	100	10	
7A	04 SET HYD PUMP A NO 2	1	1.95	100	100	10	
	ENG SW TO OFF	2	1.46	100	100	10	
		3	1.46	100	100	10	
7A	05 SET HYD PUMP B NO 1	1	1.95	100	100	10	
	ENG SW TO ON	2	1.46	100	100	10	
		3	1.46	100	100	10	
7A	06 SET HYD PUMP B NO 1	1	1.95	100	100	10	
	ENG SW TO OFF	2	1.46	100	100	10	CP
		3	1.46	100	100	10	
7A	07 SET HYD PUMP B NO 2	1	1.95	100	100	10	
	ENG SW TO ON	2	1.46	100	100	10	
		3	1.46	100	100	10	
7A	08 SET HYD PUMP B NO 2	1	1.46	100	100	10	
	ENG SW TO OFF	2	1.95	100	100	10	CP
		3	1.46	100	100	10	
7A	09 MON HYD SYS A NO 1	1	.55	100	100	10	
	PUMP LO PRESS LT ON					10	
7A	10 MON HYD SYS A NO P	1	.55	100		10	
	PUMP LO PRESS LT OFF					10	

7A	11	MON HYD SYS B NO 1	1	.55	100				10	
		PUMP LO PRESS LT ON							10	CP
7A	12	MON HYD SYS B NO 1	1	.55	100				10	
		PUMP LO PRESS LT OFF							10	
7A	13	MON HYD SYS B NO 2	1	.55	100				10	CP
		PUMP LO PRESS LT ON							10	
7A	14	MON HYD SYS B NO 2	1	.55	100				10	
		PUMP LO PRESS LT OFF							10	
7A	15	MON HYD SYS B NO 1	1	.55	100				10	
		PUMP OVRHT LT ON							10	
7A	16	MON HYD SYS B NO 1	1	.55	100				10	
		PUMP OVRHT LT OFF							10	
7A	17	MON HYD SYS B NO 2	1	.55	100				10	
		PUMP OVRHT LT ON							10	
7A	18	MON HYD SYS B NO 2	1	.55	100				10	
		PUMP OVRHT LT OFF							10	
7A	19	MON HYD BRAKE PRESS	1	2.24	100				10	C
		INDIC	2	2.07	100				10	CP
7A	20	MON HYD PRESS INDIC	1	2.03	100				10	CP
			2	2.24	100				10	
7A	21	MON HYD SYS A QTY	1	2.02	100				10	CP
		INDIC	2	2.24	100				10	
7A	22	MON HYD SYS B LO QTY	1	.54	100				10	CP
		LT ON	2	1.27	100				10	CP
7A	23	MON HYD SYS B LO QTY	1	.54	100				10	
		LT OFF	2	1.27	100				10	
7A	24	MON MASTER CAUT AND	1	.53	100				10	
		HTDRAULIC ANNUN LTS							10	
		ON							10	
7A	25	ACTUATE MASTER CAUT	1	2.14	100	100			10	
		RESET SW	2	2.14	100		100		10	
7A	26	MON HYD ANNUN LT ON	1	.53	100				10	CP
7A	27	MON HYD ANNUN LT OFF	1	.53	100				10	
7A	28	ACTUATE ANNUN PNL	1	2.28	10	100			10	
		RECALL SW	2	1.93	10	100			10	7A
7A	29	CHECK SYS B HYD PUMP	1	.90	100				10	P
		SWAS OFF	2	1.52	100				10	P
7A	30	CHECK ENG NO.1 SYS A	1	1.36	100				10	
		HYD PUMP SW SET TO							10	
		ON							10	
7A	31	CHECK ENG NO.2 SYS A	1	.75	100				10	P
		HYD PUMP SW SET TO							10	
		ON							10	
7A	32	MON HYD SYS SWAS	1	2.00	100				10	
7A	33	MON MASTER CAUTION	1	.70	100				10	
		AND ALL ANNUN PNL	2	.54	100				10	
		LTS ILLUMINATED							10	
7A	34	SET GROUND INTER-	1	1.48	100	100			10	CP
		CONNECT SW TO OPEN	2	2.58	100		100		10	P
7A	35	SET GROUND INTER-	1	1.48	100	100			10	
		CONNECT SW TO CLOSED	2	2.58	100		100		10	
7A	36	MON ALL ANNUN LTS	1	.53	100				10	
7A	37	MON OVHD PNL LTS	1	2.2	100				10	
7A	38	MON HYD SYS A NO 2	1	.55	100				10	
		PUMP LO PRESS LT ON							10	
7A	39	MON HYD SYS A NO 2	1	.55	100				10	
		PUMP LO PRESS LT ON							10	
7B	03	MON NO 1 GEN DR LOW	1	1.02	100				10	P
		OIL PRESS LT ON							10	
7B	04	MON NO 1 GEN DR LOW	1	1.02	100				10	

			3	1.75	100	100	10	
			4	1.75	100	100	10	P
7B	35	SET APU GEN NO.1 SW	1	1.98	100	100	10	P
		TO OFF	2	1.50	100	100	10	P
			3	1.75	100	100	10	
7B	36	MON GEN NO.2 TRANS	1	.59	100		10	P
		FER BUS OFF LT ON	2	.92	100		10	
7B	37	MON GEN NO.2 TRANS-	1	.59	100		10	
		FER BUS OFF LT OFF	2	.92	100		10	
7B	38	MON GEN NO.2 BUS OFF	1	.59	100		10	
		LT ON	2	.92	100		10	
7B	39	MON GEN NO.2 BUS OFF	1	.59	100		10	
		LT OFF	2	.92	100		10	
7B	40	MON GEN NO.2 GEN OFF	1	.59	100		10	
		BUS LT ON	2	.92	100		10	
7B	41	MON GEN NO.2 GEN OFF	1	.59	100		10	
		BUSS LT OFF					10	
7B	42	SET GEN NO.2 SW TO	1	1.72	100	100	10	
		ON					10	
7B	43	SET GEN NO.2 SW TO	1	1.72	100	100	10	
		OFF					10	
7B	44	SET APU GEN NO.2 SW	1	1.98	100	100	10	P
		TO ON	2	1.50	100	100	10	P
7B	45	SET APU GEN NO.2 SW	1	1.98	100	100	10	
		TO OFF	2	1.50	100	100	10	
7B	46	SET GRD PWR SW TO ON	1	2.44	100	100	10	P
7B	47	SET GRD PWR SW TO	1	2.44	100	100	10	
		OFF					10	
7B	48	MON GRD PWR AVAIL	1	1.02	100		10	
		LT ON					10	
7B	49	MON GRD PWR AVAIL	1	1.02	100		10	
		LT OFF					10	
7B	50	MON NO.1 GEN AC AMPS	1	2.16	100		10	P
		INDIC					10	
7B	51	MON NO.2 GEN AC AMPS	1	2.16	100		10	
		INDIC					10	
7B	52	MON DC AMPS INDIC	1	2.04	100		10	
			2	1	100		10	
7B	53	MON DC VOLTS INDIC	1	2.06	100		10	
7B	54	SET BATTERY SW TO ON	1	2.06	100	100	10	
			2	3.30	100	100	10	
7B	55	SET BATTERY SW TO	1	2.06	100	100	10	
		OFF	2	3.30	100	100	10	
			3	3.30	100	100	10	
7B	56	SET DC METER SEL SW	1	3.36	100	100	10	
		TO STDBY PWR	2	2.18	100	100	10	
7B	57	SET DC METER SEL SW	1	3.36	100	100	10	
		TO BATT	2	2.18	100	100	10	
7B	58	SET DC METER SEL SW	1	3.36	100	100	10	
		TO TR 1	2	2.18	100	100	10	
7B	59	SET DC METER SEL SW	1	3.36	100	100	10	
		TO TR 2	2	2.18	100	100	10	
7B	60	SET DC METER SEL SW	1	3.36	100	100	10	
		TO TR 3	2	2.18	100	100	10	
7B	61	SET DC METER SEL SW	1	3.36	100	100	10	
		TO TEST	2	2.18	100	100	10	
7B	62	MON AC FREQ INDIC	1	2.04	100		10	P
7B	63	MON AC VOLTS INDIC	1	2.06	100		10	P
			2	1	100		10	
7B	64	SET AC METER SEL SW	1	3.36	100	100	10	P

		TO STDBY PWR	2	2.18	100	100	10	
7B	65	SET AC METER SEL SW	1	3.36	100	100	10	P
		TO GND PWR	2	2.18	100	100	10	
7B	66	SET AC METER SEL SW	1	3.36	100	100	10	
		TO GEN 1	2	2.18	100	100	10	
7B	67	SET AC METER SEL SW	1	3.36	100	100	10	
		TO APU GEN	2	2.18	100	100	10	
7B	68	SET AC METER SEL SW	1	3.36	100	100	10	
		TO GEN 2	2	2.18	100	100	10	
7B	69	SET AC METER SEL SW	1	3.36	100	100	10	
		TO TEST	2	2.18	100	100	10	
7B	70	SET GALLEY PWR SW	1	.56	100	100	10	P
		TO ON	2	1.80	100	100	10	P
7B	71	SET GALLEY PWR SW	1	.56	100	100	10	
		TO OFF	2	1.00	100	100	10	
			3	1.80	100	100	10	
7B	72	ACTUATE RESIDUAL	1	2.57	100	100	10	P
		VOLTS SW	2	2.06	90	100	10	
7B	73	MON MASTER CAUTION	1	.73	100		10	P
		AND ELEC ANNUN LTS					10	
		ON					10	
7B	74	ACTUATE MASTER CAUT	1	2.13	100	100	10	P
		RESET SW	2	2.49	100	100	10	P
7B	75	MON ELEC ANNUN LT ON	1	.54	100		10	P
7B	76	MON ELEC ANNUN LT	1	.54	100		10	
		OFF					10	
7B	77	ACTUATE ANNUN PNL	1	2.13	100		10	
		RECALL SW	2	2.49	100		10	
7B	75	SET EQUIP COOLING SW	1	1.65	100	100	10	P
		TO NORMAL					10	
7B	79	SET EQUIP COOLING SW	1	1.65	100	100	10	
		TO ALTERNATE					10	
7B	80	MON EQUIP COOLING	1	1.04	100		10	P
		OFF LT ON	2	1.13	100		10	P
7B	81	MON EQUIP COOLING	1	1.04	100		10	
		OFF LT OFF	2	1.13	100		10	
7B	82	MON OVHD ANNUN LT ON	1	.54	100		10	
7B	83	MON OVHD ANNUN LT	1	.54	100		10	
		OFF					10	
7B	84	CHECK BATT SW ON	1	.90	100		10	
7B	85	CHECK CBDS ON P-6	1	4.00	100		10	
		PNL					10	
7B	86	CHECK MASTER ELEC SW	1	4.00	100		10	
		ON P-6 PNL	2	2.00	100		10	
7B	87	CHECK CBDS ON P-18	1	4.00	100		10	
		PNL					10	
7B	88	CHECK ENG NO.1 GEN	1	1.33	100		10	P
		DR DISCON SW					10	
		SAFETIED					10	
7B	89	CHECK ENG NO.2 GEN	1	.80	100		10	P
		DR DISCON SW					10	
		SAFETIED					10	
7B	90	CHECK THAT CSD DRIVE	1	1.39	100		10	P
		TEMP SW SET TO IN					10	
7B	91	CHECK THAT BUS TX SW	1	1.23	100		10	P
		IS SET TO AUTO					10	
7B	92	CHECK THAT EQUIP	1	1.35	100		10	P
		COOLING SW IS SET TO					10	
		NORMAL					10	
7B	93	MON GALLEY POWER SW	1	1.41	100		10	P

		SET TO ON					10	
7B	94	MON GALLEY POWER SW	1	1.41	100		10	
		SET TO OFF					10	
7C	01	MON V-REF INDIC	1	2.3	100		10	
7C	02	SET ZERO FUEL WT SEL	1	4	20	80	10	
7C	03	MON ZERO FUEL WT	1	4	80		10	
7C	07	SET LANDING FLAP SEL	1	1.8	100	100	10	
7C	09	MON TANK NO 1 FUEL	1	2.02	100		10	P
		QTY INDIC	2	2.27	100		10	P
			3	3	30		10	
7C	10	MON TANK NO.2 FUEL	1	2.02	100		10	P
		QTY INDIC	2	2.27	100		10	P
			3	3	30		10	
7C	11	MON CTR TANK FUEL	1	2.10	100		10	P
		QTY INDIC	2	2.46	100		10	P
			3	3	30		10	
7C	12	MON FUEL TEMP INDIC	1	2.05	100		10	P
7C	13	MON CROSSFEED VALVE	1	.55	100		10	P
		OPEN LT OFF					10	
7C	14	MON CROSSFEED VALVE	1	.55	100		10	
		OPEN LT ON BRIGHT					10	
7C	15	MON CROSSFEED VALVE	1	.55	100		10	
		OPEN LT ON DIM					10	
7C	16	SET CROSSFEED SEL	1	2.79	100	100	10	P
		SW TO OPEN	2	2.02	100	100	10	P
7C	17	SET CROSSFEED SEL	1	2.79	100	100	10	
		SW TO CLOSED	2	2.02	100	100	10	
7C	18	SET ENG NO 1 FUEL HT	1	1.99	100	100	10	P
		SW TO ON					10	
7C	19	SET ENG NO.1 FUEL HT	1	1.99	100	100	10	
		SW TO OFF					10	
7C	20	MON CTR TANK LEFT	1	.89	100		10	
		FUEL PUMP LO PRESS	2	.55	100		10	
		LT ON					10	
7C	21	MON CTR TANK LEFT	1	.89	100		10	P
		FUEL PUMP LO PRESS	2	.55	100		10	P
		LT OFF					10	
7C	22	MON CTR TANK RIGHT	1	.55	100		10	
		FUEL PUMP LO PRESS	2	.89	100		10	
		LT ON					10	
7C	23	MON CTR TANK RIGHT	1	.55	100		10	
		FUEL PUMP LO PRESS	2	.89	100		10	
		LT OFF					10	
7C	24	SET CTR TANK LEFT	1	1.45	100	100	10	P
		FUEL PUMP SW TO ON	2	2.35	100	100	10	P
7C	25	SET CTR TANK LEFT	1	1.45	100	100	10	
		FUEL PUMP SW TO OFF	2	2.35	100	100	10	
			3	2.35	100	100	10	
			4	1.45	100	100	10	
7C	26	SET CTR TANK RIGHT	1	1.45	100	100	10	
		FUEL PUMP SW TO ON	2	2.35	100	100	10	
7C	27	SET CTR TANK RIGHT	1	1.45	100	100	10	
		FUEL PUMP SW TO OFF	2	2.35	100	100	10	
			3	1.45	100	100	10	
7C	28	MON TANK NO.1 AFT	1	.58	100		10	
		FUEL PUMP LO PRESS	2	.95	100		10	P
		LT ON					10	
7C	29	MON TANK NO.1 AFT	1	.58	100		10	
		FUEL PUMP LO PRESS	2	.95	100		10	
		LT OFF					10	

		VALVE CLOSED LT ON	2	.95	100			10	
		BRIGHT						10	
7C	54	MON ENG NO.2 FUEL	1	.55	100			10	
		VALVE CLOSED LT ON	2	.95	100			10	
		DIM						10	
7C	55	MON ENG NO.2 FILTER	1	.55	100			10	
		ICING LT ON	2	.95	100			10	
7C	56	MON ENG NO.2 FILTER	1	.55	100			10	
		ICING LT OFF	2	.95	100			10	
7C	57	MON ENG NO.2 VALVE	1	.55	100			10	
		OPEN LT OFF	2	.95	100			10	
7C	58	MON ENG NO.2 VALVE	1	.55	100			10	
		OPEN LT ON BRIGHT	2	.95	100			10	
7C	59	MON ENG NO.2 VALVE	1	.55	100			10	
		OPEN LT ON DIM	2	.95	100			10	
7C	60	SET ENG NO.2 FUEL	1	1.62	100	100		10	P
		HT SW TO ON						10	
7C	61	SET ENG NO.2 FUEL	1	1.62	100	100		10	
		HT SW TO OFF						10	
7C	62	MON MASTER CAUTION	1	.73	100			10	P
		AND FUEL ANNUN LTS						10	
		ON						10	
7C	63	PRESS MASTER CAUT	1	2.02	100	100		10	P
		RESET SW						10	
7C	64	MON FUEL ANNUN LT ON	1	.56	100			10	P
7C	65	MON FUEL ANNUN LT	1	.56	100			10	
		OFF						10	
7C	66	PRESS ANNUN PNL	1	2.02	100			10	
		RECALL SW						10	
7C	67	CHECK ENG NO.1 FUEL	1	1.14	100			10	P
		HEAT SW OFF						10	
7C	68	CHECK ENG NO.2 FUEL	1	.83	100			10	P
		HEAT SW OFF						10	
7C	69	CHECK CROSSFEED	1	.81	100			10	P
		VALVE SW CLOSED						10	
7C	70	MON FUEL PUMP SWAS	1	1.59	100			10	P
		ALL SET TO ON						10	
		(6 SWITCHES)						10	
7C	71	MON FUEL PUMP SWAS	1	1.59	100			10	
		ALL SET TO OFF						10	
		6 SWITCHES						10	
7C	72	PRESS FUEL QTY TEST	1	2.07	10	100		10	
		SW	2	2.07	10		100	10	
			3	6.20	5		100	10	
7D	01	MON DUCT PRESS INDIC	1	2.29	100			10	CP
7D	02	SET GASPER FAN SW TO	1	2.70	100	100		10	
		ON	2	2.70	100		100	10	
7D	03	SET GASPER FAN SW TO	1	2.70	100	100		10	
		OFF	2	2.70	100		100	10	
7D	04	ACTUATE WING BODY	1	2.20	100	100		10	
		OVRHT TEST SW						10	
7D	05	SET LEFT PACK SW	1	1.52	100	100		10	CP
		TO ON	2	2.49	100	100		10	CP
			3	1.52	100		100	10	
			4	2.69	100		100	10	
7D	06	SET LEFT PACK SW	1	1.52	100	100		10	
		TO OFF	2	2.49	100	100		10	
			3	2.65	100		100	10	
7D	07	SET LEFT PACK BLEED	1	2.00	100	100		10	CP
		SW TO ON						10	

7D	08	SET LEFT PACK BLEED	1	2.00	100	100		10	
		SW TO OFF						10	CP
7D	09	MON LEFT PACK OFF	1	1.00	50			10	
		LT ON						10	
7D	10	MON LEFT PACK OFF	1	1.00	50			10	
		LT OFF						10	
7D	11	MON LEFT WING BODY	1	1.00	50			10	CP
		OVRHT LT ON						10	
7D	12	MON LEFT WING BODY	1	1.00	50			10	
		OVRHT LT OFF						10	
7D	13	MON LEFT BLEED TRIP	1	1.00	50			10	
		OF LT ON						10	
7D	14	MON LEFT BLEED TRIP	1	1.00	50			10	
		OFF LT OFF						10	
7D	15	SET LEFT ENG BLEED	1	2.40	100	100		10	
		SW TO ON	2	1.53	100		100	10	
7D	16	SET LEFT ENG BLEED	1	2.40				10	
		SW TO OFF	2	1.53				10	
7D	17	SET APU ENG BLEED	1	2.40	100	100		10	CP
		SW TO ON	2	1.53	100		100	10	P
7D	18	SET APU ENG BLEED	1	2.40	100	100		10	
		SW TO OFF	2	1.53	100		100	10	
7D	19	SET RIGHT PACK SW	1	2.60	100	100		10	CP
		TO ON	2	1.52	100		100	10	
7D	20	SET RIGHT PACK SW	1	2.60	100	100		10	
		TO OFF	2	2.00	100		100	10	
7D	21	MON RT PACK TRIP OFF	1	1.00	100			10	
		LT ON						10	
7D	22	MON RT PACK TRIP OFF	1	1.00	50			10	
		LT OFF						10	
7D	23	MON RT WING BODY	1	1.00	50			10	
		OVRHT LT ON						10	
7D	24	MON RT WING BODY	1	1.00	50			10	
		OVRHT LT OFF						10	
7D	25	MON RT BLEED TRIP	1	1.00	50			10	
		OFF LT ON						10	
7D	26	MON RT BLEED TRIP	1	1.00	50			10	
		OFF LT OFF						10	
7D	27	SET RT BLEED SW TO	1	2.60	100	100		10	
		ON	2	1.53	100		100	10	
7D	28	SET RT BLEED SW TO	1	2.60	100	100		10	
		OFF						10	
7D	29	ACTUATE PACK/BLEED/ DUCT OVRHT TRIP RESET SW	1	1.88	100	100		10	CP
								10	
7D	30	SET ISOLATION VALVE	1	1.85	100	100		10	CP
		SW TO OPEN	2	1.77	100	100		10	
			3	1.53	100		100	10	P
7D	31	SET ISOLATION VALVE	1	1.77	100	100		10	CP
		SW TO CLOSED	2	1.85	100	100		10	
			3	1.53	100		100	10	
7D	32	SET ISOLATION VALVE	1	1.77	100	100		10	
		SW TO AUTO	2	1.85	100	100		10	
			3	1.53	100		100	10	
7D	33	MON DUAL BLEED LT ON	1	.28	100			10	
7D	34	MON DUAL BLEED LT	1	.28	100			10	
		OFF						10	
7D	35	MON LEFT RAM DOOR	1	.28	100			10	
		FULL OPEN LT ON						10	
7D	36	MON LEFT RAM DOOR	1	.28	100			10	

7E	20	SET PRESS MODE SEL	1	2.65	100	100	10	
		SW TO MAN-AC					10	
7E	21	SET PRESS MODE SEL	1	2.65	100	100	10	
		SW TO MAN-DC					10	
7E	22	MON AUTO FAIL LT ON	1	.97	100		10	CP
7E	23	MON AUTO FAIL LT OFF	1	.97	100		10	
7E	24	MON OFF SCHED	1	1.33	100		10	CP
		DESCENT LT ON					10	
7E	25	MON OFF SCHED	1	1.33	100		10	
		DESCENT LT OFF					10	
7E	26	MON STDBY LT ON	1	.66	100		10	CP
			2	.60	100		10	CP
7E	27	MON STDBY LT OFF	1	.66	100		10	
			2	.60	100		10	
7E	28	MON MANUAL LT ON	1	.65	100		10	CP
7E	29	MON MANUAL LT OFF	1	.65	100		10	
7E	30	MON MASTER CAUTION	1	.70	100		10	
		AND AIR COND ANNUN	2	.54	100		10	
		LTS ON					10	
7E	31	PRESS MASTER CAUTION	1	2.14	100	100	10	
		RESET SW					10	
7E	32	MON AIR COND ANNUN	1	.54	100		10	
		LT ON					10	
7E	33	MON AIR COND ANNUN	1	.54	100		10	
		LT OFF					10	
7E	34	PRESS ANNUN PNL	1	2.14	100	100	10	
		RESET SW					10	
7E	35	MON FLT/GRD SW SET	1	.54	100		10	
		TO FLIGHT					10	
7E	36	MON FLT/GRD SW SET	1	.54	100		10	
		TO GROUND					10	
7E	37	MON CABIN PRESS INDC	1	.7	100		10	
							10	
7F	01	SET ENG VIB PICKUP	1	1.91	100	100	10	CP
		SW TO TURB					10	
7F	02	SET ENG VIB PICKUP	1	1.91	100	100	10	
		SW TO INLET					10	
7F	03	PRESS ENG VIB TEST	1	1.44	10	100	10	
		SW	2	2.10	10	100	10	
			3	5.48	10		100	
7F	04	PRESS OIL QTY TEST	1	1.36	10	100	10	
		SW	2	2.02	10	100	10	
			3	1.36	10		100	
			4	4.25	10		100	
7F	05	MON NO 1 ENG LO OIL	1	.83	100		10	CP
		PRESS LT ON					10	
7F	06	MON NO 1 ENG LO OIL	1	.83	100		10	
		PRESS LT OFF					10	
7F	07	MON NO 1 ENG OIL	1	.83	100		10	
		FILTER BYPASS LT ON					10	
7F	08	MON NO 1 ENG OIL	1	.83	100		10	
		FILTER BYPASS LT OFF					10	
7F	09	MON NO 1 ENG OIL	1	2.05	80		10	CP
		PRESS INDIC	2	2.25	80		10	CP
			3	.44	50		10	
7F	10	MON NO 1 ENG OIL	1	2.05	80		10	
		TEMP INDIC	2	2.25	80		10	
			3	2.28	100		10	CP
			4	.44	50		10	
7F	11	MON NO 1 ENG OIL QTY	1	2.05	100		10	

	INDIC	2	2.25	100		10	
		3	.44	50		10	
7F	12 MON NO 1 ENG VIBRA-	1	2.05	90		10	
	TION AMPLITUDE INDIC	2	2.25	90		10	
		3	2.02	90		10	
		4	.44	50		10	CP
7F	13 MON NO 2 ENG LO OIL	1	.83	100		10	
	PRESS ANNUN LT ON					10	
7F	14 MON NO 2 ENG LO OIL	1	.83	100		10	
	PRESS ANNUN LT OFF					10	
7F	15 MON NO 2 ENG OIL	1	.83	100		10	
	FILTER BYPASS ANNUN					10	
	LT ON					10	
7F	16 MON NO 2 ENG OIL	1	.83	100		10	
	FILTER BYPASS ANNUN					10	
	LT OFF					10	
7F	17 MON NO 2 ENG OIL	1	2.05	100		10	
	PRESS INDIC	2	2.25	100		10	
		3	.44	50		10	
7F	18 MON NO 2 ENG OIL	1	2.05	100		10	
	TEMP INDIC	2	2.25	100		10	
		3	2.02	100		10	CP
		4	.44	50		10	
7F	19 MON NO 2 ENG OIL	1	2.05	100		10	
	QTY INDIC	2	2.25	100		10	
		3	2.08	100		10	CP
		4	.44	50		10	
7F	20 MON NO 2 ENG VIBR	1	2.05	90		10	
	AMPLITUDE INDIC	2	2.25	90		10	
		3	2.02	90		10	CP
		4	.44	50		10	
7F	21 MON NO 1 ENG N1 IND	1	2.02	100		10	20C
		2	2.52	100		10	
		3	.44	50		10	
7F	22 MON NO 2 ENG N1 IND	1	2.02	100		10	20C
		2	2.52	100		10	
		3	.44	50		10	
7F	23 MON NO 1 ENG N2 IND	1	2.02	100		10	C
		2	2.52	100		10	CP
		3	10.	100		10	
		4	.44	50		10	
7F	24 MON NO 2 ENG N2 IND	1	2.02	100		10	C
		2	2.52	100		10	
		3	10.	100		10	
		4	.44	50		10	
7F	25 MON ENG NO 1 EPR IND	1	2.24	100		10	
		2	2.02	100		10	
		3	30	5		5	P
		4	.44	50		10	
7F	26 SET ENG NO 1 EPR BUG	1	5	20 100		10	
		2	5	20 100		10	
		3	2.32	20 100		10	
		4	2.32	20 100		10	
7F	27 MON ENG NO 1 EPR BUG	1	2.00	80		10	
		2	.76	50		10	
7F	28 SET ENG NO 2 EPR BUG	1	5.00	20 100		10	
		2	5.00	20 100		10	
		3	2.32	20 100		10	
		4	2.32	20 100		10	
7F	29 MON ENG NO 2 EPR BUG	1	2.00	80		10	

		2	.76	50		10	
7F	30 MON ENG NO 2 EPR IND	1	2.24	100		10	
		2	2.02	100		10	
		3	.44	50		10	
		4	.30	5		5	
7F	31 MON ENG NO 1 EXH GAS	1	2.02	100		10	C
	TEMP IND	2	.44	50		10	
		3	.30	5		5	
7F	32 MON ENG NO 2 EXH GAS	1	2.02	100		10	C
	TEMP IND	2	.44	50		10	
		3	.30	5		5	
7F	33 MON ENG NO 1 FUEL	1	2.02	100		10	C
	FLOW INDIC	2	.44	50		10	
		3	.30	5		5	
7F	34 MON ENG NO 2 FUEL	1	2.02	100		10	C
	FLOW INDIC	2	.44	50		10	
		3	.30	5		5	
7G	01 SET NO SMOKING LT SW	1	1.80	100	100	10	P
	TO ON	2	2.71	100	100	10	
7G	02 SET NO SMOKING LT SW	1	1.80	100	100	10	
	TO AUTO	2	2.71	100	100	10	
7G	03 SET NO SMOKING LT SW	1	1.80	100	100	10	
	TO OFF	2	2.71	100	100	10	
7G	04 SET FASTEN SEAT BELT	1	1.71	100	100	10	P
	LT SW TO ON					10	
7G	05 SET FASTEN SEAT BELT	1	1.71	100	100	10	
	LT SW TO AUTO					10	
7G	06 SET FASTEN SEAT BELT	1	1.71	100	100	10	
	LT SW TO OFF	2	1.71	100	100	10	
7G	07 ADJUST PANEL LTS	1	2.17	100	100	10	CP
	BRIGHTNESS CONTROL	2	2.10	100	100	10	P
		3	2.73	100	100	10	P
7G	08 ADJUST BACKGROUND	1	2.08	100	100	10	P
	LTS BRIGHTNESS CONT					10	
7G	09 ADJUST CIRCUIT BRKR	1	3.31	100	100	10	
	LTS BRIGHTNESS CONT	2	1.50	100	100	10	
7G	10 SET DOME LT SW TO	1	3.43	100	100	10	P
	DIM					10	
7G	11 SET DOME LT SW TO	1	3.43	100	100	10	
	OFF					10	
7G	12 SET DOME LT SW TO	1	3.43	100	100	10	
	BRIGHT					10	
7G	13 ADJUST FLOOD LT	1	2.09	100	100	10	P
	BRIGHTNESS CONT					10	
7G	14 ADJUST CONTROL STAND	1	3.13	100	100	10	P
	PANEL LTS BRIGHTNESS					10	
	CONT					10	
7G	16 SET LANDING LTS SW	1	2.20	100	100	10	P
	TO OFF	2	1.50	100	100	10	
7G	17 SET LANDING LIGHTS	1	2.20	100	100	10	
	SW TO ON	2	2.20	100	100	10	
7G	18 SET RUNWAY TURNOFF	1	2.25	100	100	10	P
	LTS SW TO ON					10	
7G	19 SET RUNWAY TURNOFF	1	2.25	100	100	10	
	LTS SW TO OFF					10	
7G	20 SET TAXI LTS SW TO	1	2.42	100	100	10	P
	ON					10	
7G	21 SET TAXI LTS SW TO	1	2.42	100	100	10	
	OFF					10	
7G	22 SET POSITION LTS SW	1	2.42	100	100	10	P

		PRESS INDIC							10	
7H	02	MON PASS OXY PRESS	1	2.03	100				10	CP
		INDIC							10	
7H	03	MON PASS OXY ON LT	1	1.59	100				10	CP
		ON							10	
7H	04	MON PASS OXY ON LT	1	1.59	100				10	
		OFF							10	
7H	05	SET PASS OXY SW TO	1	3.29	100	100			10	CP
		ON							10	
7H	06	SET PASS OXY SW TO	1	3.29	100	100			10	
		NORMAL							10	
7H	07	ACTUATE CREW OXY	1	1.40	100	100			10	
		SHUTOFF VALVE							10	
7H	08	SET OXY EMERGENCY	1	1.30	100	100			10	
		LEVER TO ON							10	
7H	09	SET OXY EMERGENCY	1	1.30	100	100			10	
		LEVER TO OFF							10	
7H	10	SET OXY DILUTER	1	1.40	100	100			10	
		LEVER TO NORMAL							10	
7H	11	SET OXY DILUTER	1	1.40	100	100			10	
		LEVER TO 100 PCT							10	
7H	12	MON OXY FLOW INDIC	1	1.5	100				10	
7H	13	SET OXY SUPPLY SW	1	1.40	100	100			10	
		TO ON							10	
7H	14	SET OXY SUPPLY SW	1	1.40	100	100			10	
		TO OFF							10	
7H	15	OPEN EMERGENCY OXY							10	
		MAN ACTUATION ACCESS							10	
		DOOR							10	
7H	16	PULL EMERGENCY OXY							10	
		MAN ACTUATION HANDLE							10	
7H	17	POT ON OXY MASK	1	4.0	100	100	100		10	
7H	18	TAKE OFF OXY MASK	1	4.0	100	100	100		10	
		AND STOW							10	
7H	19	CHECK PORTABLE OXY	1	5.0	100	100	100		10	
		BOTTLE PRESS AND							10	
		MASK							10	
7H	20	SET CREW OXY VALVE	1	2.0	100	100			10	
		TO OPEN							10	
7H	21	MON PASS OXY QTY	1	2.0	100				10	
		INDIC							10	
7H	22	INHALE AND CHECK	1	4.0	100				10	
		THAT NO AIR OR OXY							10	
		IS SUPPLIED							10	
7H	23	INHALE AND CHECK	1	4.0	100				10	
		THAT COCKPIT AIR IS							10	
		SUPPLIED							10	
7H	24	INHALE AND CHECK	1	4.0	100	100			10	
		THAT OXY IS SUPPLIED							10	
7H	25	INHALE AND CHECK	1	4.0	100	100			10	
		THAT CONSTANT OXY							10	
		PRESSURE SUPPLIED							10	
7J	01	SET WING ANTI-ICE SW	1	1.79	100	100			10	CP
		TO GRD TEST	2	2.76	100	100			10	
7J	02	SET WING ANTI-ICE SW	1	1.79	100	100			10	
		TO ON	2	2.76	100	100			10	
7J	03	SET WING ANTI-ICE SW	1	1.79	100	100			10	
		TO OFF	2	2.76	100	100			10	
			3	1.79	100	100	100		10	
7J	04	MON WING ANTI-ICE	1	.56	100				10	CP

		LT OFF						10
7J	30	MON CAPT STATIC 1	1	1.13	100			10
		AUX P/S HTF LT ON	2	1	50			10
7J	31	MON CAPT STATIC 1	1	1.13	100			10
		AUX P/S HTR LT OFF						10
7J	32	MON L ELEV PITOT HTR	1	1.13	100			10
		LT ON	2	1	50			10
7J	33	MON L ELEV PITOT HTR	1	1.13	100			10
		LT OFF						10
7J	34	MON F/O PITOT HTR	1	1.14	100			10
		LT ON	2	1	50			10
7J	35	MON F/O PITOT HTR	1	1.14	100			10
		LT OFF						10
7J	36	MON F/O STATIC 2	1	1.14	100			10
		AUX P/S HTR LT ON	2	1	50			10
7J	37	MON F/O STATIC 2	1	1.14	100			10
		AUX P/S HTR LT OFF						10
7J	38	MON R ELEV PITOT	1	1.14	100			10
		HTR LT ON	2	1	50			10
7J	39	MON R ELEV HTR LT	1	1.14	100			10
		OFF						10
7J	40	MON MASTER CAUTIONAND1		.70	100	100		10
		ANTI-ICE ANNUN LTS	2	.54	100	100		10
		ON						10
7J	41	PRESS MASTER CAUTION	1	2.14	100	100		10
		RESET SW						10
7J	42	MON ANTI-ICE ANNUN	1	.54	100			10
		LT ON						10
7J	43	MON ANTI-ICE ANNUN	1	.54	100			10
		LT OFF						10
7J	44	PRESS ANNUN PNL	1	2.14	100	100		10
		RECALL SW						10
7J	45	MON PITOT STATIC SYS	1	1.47	100			10
		A HT SW SET TO ON						10
7J	46	MON PITOT STATIC SYS	1	.75	100			10
		B HT SW SET TO ON						10
7J	47	MON PITOT STATIC SYS	1	1.47	100			10
		A HT SW SET TO OFF						10
7J	48	MON PITOT STATIC SYS	1	.75	100			10
		B HT SW SET TO OFF						10
7J	49	MON ENG 1 ANTI-ICE	1	1.42	100			10
		SW TO OFF						10
7J	50	MON ENG 2 ANTI-ICE	1	.76	100			10
		SW SET TO OFF						10
7K	01	PUSH L RAIN REPEL SW	1	2.31	100	100		10
7K	02	PUSH R RAIN REPEL SW	1	1.38	100	100		10
7K	03	SET WINDSHIELD WIPER	1	2.37	80	100		10
		SEL SW TO OFF						10
7K	04	SET WINDSHIELD WIPER	1	2.37	80	100		10
		SEL SW TO LOW						10
7K	05	SET WINDSHIELD WIPER	1	2.37	80	100		10
		SEL SW TO HIGH						10
7K	06	SET WINDSHIELD WIPER	1	2.37	80	100		10
		SEL SW TO PARK						10
7K	07	SET WINDOW HEAT SWS	1	4.22	100	100.		10
		TO ON						10
7K	08	SET WINDOW HEAT SWS	1	4.22	100	100		10
		TO OFF						10
7K	09	MON RAIN REPELLANT	1	2.0	100			10
		QTY INDIC						10

CP

P

P

P

P

P

P

P

P

CP

7K	10	CHECK WINDSHIELD WIPER SWAS SET TO OFF	1	1.19	100		10	P
7K	11	MON WINDOW HEAT ON LTS GREEN	1	1.14	100		10	CP
7K	12	MON WINDOW HEAT ON LTS OFF	1	1.14	100		10	
7K	13	MON WINDOW OVRHT LTS ON	1	1.81	100		10	CP
7K	14	MON WINDOW OVRHT LTS OFF	1	1.81	100		10	
7K	15	ACT WINDOW OVRHT TEST SW	1	2.04	100		10	CP
7K	16	SET WINDOW HT SW OFF	1	1.2	20	100	10	
7L	01	MON APU EXHAUST TEMP GAGE INDIC	1	2.09	100		10	P
7L	02	MON APU AC AMPS IND	1	2.09	100		10	
7L	03	MON APU LOW OIL QTY LT ON	1	2.41	100		10	P
7L	04	MON APU LOW OIL QTY LT OFF	1	.85	100		10	P
7L	05	MON APU LOW OIL PRESS LT ON	1	.85	100		10	
7L	06	MON APU LOW OIL PRESS LT OFF	1	.54	100		10	P
7L	07	MON APU HIGH OIL TEMP LT ON	1	.54	100		10	
7L	08	MON APU HIGH OIL TEMP LT OFF	1	.54	100		10	P
7L	09	MON APU OVRSPD LT ON	1	.54	100		10	
7L	10	MON APU OVRSP LT OFF	1	.54	100		10	P
7L	11	SET APU SW TO OFF	1	3.59	100	100	10	P
			2	2.73	100	100	10	P
			3	2.57	100	100	10	P
			4	2.29	100	100	10	P
7L	12	SET APU SW TO ON	1	3.59	100	100	10	
			2	2.73	100	100	10	
			3	2.57	100	100	10	
			4	2.29	100	100	10	
7L	13	SET APU SW TO START- MOMENTARY ACTION	1	3.59	100	100	10	
			2	2.73	100	100	10	
			3	2.57	100	100	10	
			4	2.29	100	100	10	
7L	14	MON MASTER CAUTION AND APU ANNUN LTS ON	1	.73	100		10	
7L	15	PRESS MASTER CAUTION RESET SW	1	2.14	100	100	10	
7L	16	MON APU ANNUN LT ON	1	.54	100		10	
7L	17	MON APU ANNUN LT OFF	1	.54	100		10	
7L	18	PRESS ANNUN RNL RECALL SW	1	2.14	100	100	10	
7L	19	OPEN CB C6 ON P6-5 PANEL	1	5.	100	100	10	
7L	20	MON APU START SW SET TO OFF	1	.75	100		10	
7L	21	SET APU START SW TO OFF	1	1.5	100	100	10	
7L	22	SET APU START SW ON	1	2.29	50	100	10	

7L	23	MON APU WARN LTS	1	.88	100		10
7M	01	SET ENG NO.1 START	1	3.0	80	100	10
		SW TO OFF	2	2.43	80	100	10
			3	3.54	80	100	10
			4	1.74	80	100	10
7M	02	SET ENG NO.1 START	1	3.0	80	100	10
		SW TO GRD	2	2.43	80	100	10
			3	3.54	80	100	10
			4	1.74	80	100	10
7M	03	SET ENG NO.1 START	1	3.0	80	100	10
		SW TO FLT	2	2.43	80	100	10
			3	3.54	80	100	10
			4	1.74	80	100	10
7M	04	SET ENG NO.2 START	1	3.0	80	100	10
		SW TO OFF	2	2.43	80	100	10
			3	3.54	80	100	10
			4	1.74	80	100	10
7M	05	SET ENG NO.2 START	1	3.0	80	100	10
		SW TO GRD	2	2.43	80	100	10
			3	3.54	80	100	10
			4	1.74	80	100	10
7M	06	SET ENG NO.2 START	1	3.0	80	100	10
		SW TO FLT	2	2.43	80	100	10
			3	3.54	80	100	10
			4	1.74	80	100	10
7M	07	SET ENG NO 1 START	1	2.51	50	100	10
		LEVER TO START					10
7M	08	SET ENG NO 1 START	1	3.00	50	100	10
		LEVER TO CUTOFF	2	2.80	50	100	10
			3	3.24	50	100	10
			4	3.24	50	100	10
7M	09	SET ENG NO 2 START	1	2.51	50	100	10
		LEVER TO START					10
7M	10	SET ENG NO 2 START	1	3.24	50	100	10
		LEVER TO CUTOFF	2	2.51	50	100	10
			3	2.51	50	100	10
7M	11	MON ENG START SWAS	1	.52	100		10
		IN FLT POS					10
7M	12	CHECK ENG NO.1 START	1	2.41	100		10
		SW SET TO OFF	2	1.50	100		10
7M	13	CHECK THAT ENG NO.2	1	2.02	100		10
		START SW SET TO OFF	2	.78	100		10
7M	14	CHECK THAT ENG START	1	1.30	100		10
		LEVERS IN OFF POS	2	.78	100		10
7M	15	MON ENG 2 START LVR	1	1.30	100		10
		AUTOMATICALLY MOVED	2	.78	100		10
		TO OFF					10
7M	16	MON ENG 1 START LVR	1	1.30	100		10
		AUTOMATICALLY MOVED	2	.78	100		10
		TO OFF					10
7M	17	SET ENG NO.1 START	1	2.50	100	100	10
		SET TO OFF					10
7M	18	SET ENG NO.2 START	1	1.50	100	100	10
		SW TO OFF					10
7P	01	SET ENG NO.1 OVRHT	1	2.46	100	100	10
		DETEC SW TO NORMAL					10
7P	02	SET ENG NO.1 OVRHT	1	2.46	100	100	10
		DETEC SW TO FIRE					10
7P	03	SET ENG NO.2 OVRHT	1	1.63	100	100	10
		DETEC SW TO NORMAL					10

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7P	04	SET ENG NO.2 OVRHT	1	1.63	100	100	10	
		DETEC SW TO FIRE					10	
7P	05	MOV ENG NO.1 OVRHT	1	.90	100		10	P
		LT ON	2	.54	100		10	
7P	06	MON ENG NO.1 OVRHT	1	.90	100		10	
		LT OFF	2	.54	100		10	
7P	07	MON ENG NO.2 OVRHT	1	.90	100		10	
		LT ON	2	.54	100		10	
7P	08	MON ENG NO.2 OVRHT	1	.90	100		10	
		LT OFF	2	.54	100		10	
7P	09	SET OVRHT TEST SW TO	1	2.20	100	100	10	
		OVRHT	2	1.62	100	100	10	
7P	10	SET OVRHT TEST SW TO	1	.50	100	100	10	
		FIRE					10	
7P	11	ACTUATE EXT TEST SW	1	1.63	25	100	10	P
7P	12	MON EXT TEST LTS ON	1	.54	75		10	P
7P	13	MON WHEEL WELL FIRE	1	1.24	100		10	P
		WARNING LT ON					10	
7P	14	MON WHEEL WELL FIRE	1	1.24	100		10	
		WARNING LT OFF					10	
7P	15	MON ENG NO.1 FIRE	1	.91	100		10	P
		WARNING LT ON	2	.54	100		10	
			3	2.57	100		10	P
			4	5.0	100		10	
7P	16	MON ENG NO.1 FIRE	1	.91	100		10	7P
		WARNING LT OFF	2	.54	100		10	
			3	15.	100		10	
7P	17	PULL ENG NO.1 FIRE	1	1.87	100	100	10	7P
		WARNING SW HANDLE UP	2	1.87	100	100	10	P
		WARNING SW HANDLE UP					10	7P
7P	18	ROTATE ENG NO.1 FIRE	1	2.13	100	100	10	P
		WARNING SW HANDLE TO	2	2.13	100	100	10	7P
		LEFT					10	
7P	19	ROTATE ENG NO.1 FIRE	1	2.33	100	100	10	P
		WARNING SW HANDLE TO					10	
		RIGHT					10	
7P	20	ACTUATE ENG NO.1					10	
		FIRE WARNING OVERRIDE					10	
		SW					10	
7P	21	MON ENG NO.2 FIRE	1	.80	100		10	P
		WARNING LT ON	2	.54	100		10	
7P	22	MON ENG NO.2 FIRE	1	.54	100		10	
		WARNING LT OFF	2	.80	100		10	
7P	23	PULL ENG NO.2 FIRE	1	1.73	100	100	10	P
		WARNING SW HANDLE UP	2	1.91	100	100	10	P
7P	24	ROTATE ENG NO.2 FIRE	1	2.33	100	100	10	P
		WARNING SW HANDLE TO	2	2.53	100	100	10	
		LEFT	3	2.13	100	100	10	P
7P	25	ROTATE ENG NO.2 FIRE	1	2.53	100	100	10	
		WARNING SW HANDLE TO	2	2.33	100	100	10	
		RIGHT	3				10	
7P	26	ACTUATE ENG NO.2					10	
		FIRE WARNING OVRD					10	
		SW					10	
7P	27	MON L BOTTLE	1	.58	100		10	P
		DISCHARGE LT ON	2	.27	100		10	P
7P	28	MON L BOTTLE	1	.58	100		10	
		DISCHARGE LT OFF	1	.27	100		10	
7P	29	MON R BOTTLE	1	.58	100		10	
		DISCHARGE LT ON	2	.26	100		10	P

7P	30	MON R BOTTLE	1	.58	100			10	
		DISCHARGE LT OFF	2	.26	100			10	
7P	31	MON APU FIRE	1	.98	100			10	P
		WARNING LT ON	2	.54	100			10	
7P	32	MON APU FIRE	1	.98	100			10	
		WARNING LT OFF	2	.54	100			10	
7P	33	PULL APU FIRE	1	1.16	100	100		10	P
		WARNING SW HANDLE UP	2	1.89	100	100		10	P
7P	34	ROTATE APU FIRE	1	2.33	100	100		10	P
		WARNING SW HANDLE	2	2.53	100	100		10	P
		TO LEFT	3	2.13	100	100		10	
7P	35	ROTATE APU FIRE	1	2.33	100	100		10	
		WARNING SW HANDLE	2	2.53	100	100		10	
		TO RIGHT	3					10	
7P	36	ACTUATE APU FIRE						10	
		WARNING OVERRIDE SW						10	
7P	37	MON APU BOTTLE	1	.27	100			10	P
		DISCHARGED LT ON						10	
7P	38	MOM APU BOTTLE	1	.27	100			10	
		DISCHARGED LT OFF						10	
7P	39	MONITOR FIRE ALARM	1	.71	100			10	100 P
		WARNING LT AND BELL						10	
7P	40	PULL FIRE ALARM	1	1.50	100	100		10	
		BELL CUTOUT SW	2	1.20	100	100		10	P
			3	.91	100	100		10	P
7P	41	MON MASTER CAUTION	1	.73	100			10	
		AND OVHT/DET ANNUN						10	
		LTS ON						10	
7P	42	PRESS MASTER CAUTION	1	2.14	100	100		10	
		RESET SW						10	
7P	43	MON OVHT/DET ANNUN	1	.54	100			10	
		LT ON						10	
7P	44	MON OVHT/DET ANNUN	1	.54	100			10	
		LT OFF						10	
7P	45	PRESS ANNUN PNL	1	2.14	100	100		10	
		RECALL SW						10	
7P	46	MON FIRE WARNING	1	.54	100			10	100 P
		BELL AND ANNUN LTS						10	
		ON						10	
7P	47	PRESS FIRE WARNING	1	1.35	100	100		10	P
		ANNUN LT SW						10	
7P	48	MON ENG NO.1 OVRHT	1	.90	100			10	
		DETECT SW ON NORMAL						10	
7P	49	MON ENG NO.2 OVRHT	1	.90	100			10	
		DETECT SW ON NORMAL						10	
7P	50	MON APU DETECT INOP	1	.90	100			10	
		LT ON	2	.54	100			10	
7P	51	MON APU DETECT INOP	1	.90	100			10	
		LT OFF						10	
7P	52	SET OVHT TEST SW	1	.50	100	100		10	
		TO OFF						10	
7P	53	MONITOR LIGHT + BELL	1	.54				10	100 1007P
		OFF						10	
7Q	01	PRESS CABIN DOOR	1	2.66	50	100		10	
		UNLOCK SW	2	2.44	50	100		10	P
			3	3	50	100		10	
7Q	02	MON CABIN DOOR LOCK	1	1.29	100			10	P
		LT ON						10	
7Q	03	MON CABIN DOOR LOCK	1	1.29	100			10	
		LT OFF						10	

7Q	04	MON MASTER CAUTION AND DOORS ANNUN LTS	1	.73	100		10	
7Q	05	PRESS MASTER CAUT RESET SW	1	2.14	100	100	10	
7Q	06	MON DOORS ANNUN LT ON	1	.54	100		10	
7Q	07	MON DOORS ANNUN LT OFF	1	.54	100		10	
7Q	08	PRESS ANNUN PNL RECALL SW	1	2.14	100	100	10	
7Q	09	MON FWD ENTRY LT ON	1	1.55	100		10	
7Q	10	MON FWD ENTRY LT OFF	1	1.55	100		10	CP
7Q	11	ACTUATE FWD ENTRY LT TEST SW	1	2.46	100	100	10	P
7Q	12	MON AFT ENTRY LT ON	1	1.55	100		10	
7Q	13	MON AFT ENTRY LT OFF	1	1.55	100		10	
			2	1.12	100		10	
7Q	14	ACTUATE AFT ENTRY LT TEST SW	1	1.38	100	100	10	P
7Q	15	MON AIR STAIRS LT ON	1	1.12	100		10	CP
7Q	16	MON AIR STAIRS LT OFF	1	1.12	100		10	
7Q	17	ACTUATE AIR STAIRS LT TEST SW	1	1.41	100	100	10	P
7Q	18	MON EQUIP / TIRE BURST LT ON	1	1.12	100		10	
7Q	19	MON EQUIP / TIRE BURST LT OFF	1	1.12	100		10	
7Q	20	ACTUATE EQUIP / TIRE BURST TEST SW	1	1.38	100	100	10	P
7Q	21	MON FWD CARGO LT ON	1	1.12	100		10	
7Q	22	MON FWD CARGO LT OFF	1	1.12	100		10	CP
7Q	23	ACTUATE FWD CARGO LT TEST SW	1	1.39	100	100	10	P
7Q	24	MON AFT CARGO LT ON	1	1.12	100		10	
7Q	25	MON AFT CARGO LT OFF	1	1.12	100		10	
7Q	26	ACTUATE AFT CARGO LT TEST SW	1	1.38	100	100	10	P
7Q	27	MON FWD SERVICE LT ON	1	1.12	100		10	CP
7Q	28	MON FWD SERVICE LT OFF	1	1.12	100		10	
7Q	29	ACTUATE FWD SERVICE LT TEST SW	1	1.40	100	100	10	P
7Q	30	MON AFT SERVICE LT ON	1	1.12	100		10	
7Q	31	MON AFT SERVICE LT OFF	1	1.12	100		10	
7Q	32	ACTUATE AFT SERVICE LT TEST SW	1	1.38	100	100	10	P
8A	01	VIEW RUNWAY AHEAD	1	2.0	100		10	
			2	75	70		5	
			3	26	50		5	
8A	02	CAPT VIEW THRU NO.1 WINDOW	1	50	70		5	
			2	140	70		5	
			3	60	70		5	
			4	45	70		5	
8A	03	F.O. VIEW THRU NO.1 WINDOW	1	2.0	100		5	
			2	10	10		5	

		3	240	10					5
		4	26	10					5
8A	04 CAPT VIEW THRU	1	100	75					5
	NO.1 WINDOW	2	110	75					5
		3	15	75					5
		4	30	75					5
8A	05 CAPT VIEW THRU	1	10	25					5
	NO.1 WINDOW	2	5	25					5
		3	30	25					5
		4	60	25					5
8A	06 CAPT VIEW THRU	1	300	25					5
	NO.1 WINDOW	2	110	25					5
		3	26	70					5
		4	134	25					5
8A	07 F.O. VIEW OUT	1	134	25					5
	NO.1 WINDOW	2	78	25					5
		3	150	25					5
		4	10	25					5
8A	08 CAPT VIEW THRU NO 1	1	285	25					5
		2	75	25					5
		3	90	25					5
		4	20	25					5
8A	09 F.O. VIEW OUT	1	110	25					5
	NO.1 WINDOW	2	60	25					5
		3	5	25					5
		4	30	25					5
8A	10 CRWMBR EXTERNAL	1	5	25					5
	VISION SCAN	2	10	25					5
		3	15	25					5
		4	20	25					5
8A	11 CRWMBR EXTERNAL	1	25	25					5
	VISION SCAN	2	30	25					5
		3	35	25					5
		4	40	25					5
8A	12 CRWMBR EXTERNAL	1	45	25					5
	VISION SCAN	2	50	25					5
		3	55	25					5
		4	60	25					5
8A	13 CRWMBR EXTERNAL	1	100	25					5
	VISION SCAN	2	200	25					5
		3	300	25					5
		4	400	25					5
8A	14 CRWMBR EXTERNAL	1	500	25					5
	VISION SCAN	2	1000	15					5
		3	1500	15					5
		4	2000	15					5
8A	15 PILOT FLYING SCANS	1	26	80					60
	TDZ FOR FLARE CUES	2	30	80					60
		3	10	80					60
8B	01 RECORD DATA	1	15		20		100		10
		2	2.0		100	50	100		10
8B	02 RETREIVE CHECKLIST	1	4		10		100		10
		2	5.9		10		100		10
		3	5.9		10	100			10
8B	03 READ NEXT ITEM ON	1	2.0		100				10
	CHECKLIST	2	4.0		100				10
		3	6.0		100				10
		4	8.0		100				10
8B	04 REFER TO HANDWRITTEN	1	2.0		100				10
	DATA	2	4.0		100				10

			3	8.0	100			10
			4	12.0	100			10
8B	05	FIND CHECKLIST IN	1	10.0	100	50	50	10
		HANDBOOK	2	5.0	100	50	50	10
8B160007		RETRIEVE/REVIEW						10
		APPROACH PLATE						10
8B160008		REVIEW/ACKNOWLEDGE						10
		APPROACH PLATE DATA						10
8B	08	STOW CHECKLIST	1	3.0	50	50	100	10
8B	06	RETRIEVE CHARTS	1	6	20		100	10
			2	6	20		100	10
8B040001		REVIEW DEPARTURE	1	10.91	100		100	10
		CHART	2	10.91	100	100		10
8B	07	STOW CHARTS	1	5.91			100	10
8B010001		RETRIEVE/REVIEW	1	20	100		100	10
		COCPIT SAFETY INSPEC						10
		CHECKLIST						10
8B010002		REFER TO DATA TO	1	5.	100	100	100	10
		DETERMINE NAV AND						10
		COMM FREQS						10
8B010003		CHECK THAT MANIFEST,	1	15.	100	100	100	10
		WEIGHT SHEET, AND						10
		RELEASE PAPERS OK						10
8B010004		RETRIEVE FLIGHT	1	3.0	50	100	50	10
		PLANNING REF. DATA						10
		MANUAL						10
8B010005		STOW FLIGHT PLANNING	1	2.0	50	100	50	10
		REF. DATA MANUAL						10
8B010006		REFER TO REF. DATA	1	30.	100	100	100	10
		AND COMPUTE TAKEOFF						10
		EPR BUG SETTING						10
		VALUE						10
8B010007		REFER TO REF. DATA	1	30.	100	100	100	10
		AND COMPUTE TAKEOFF						10
		V1 AND VR BUG SET						10
		VALUES						10
8B090001		READ NEXT ITEM ON	1	1.	100			10
		CHECKLIST ON CONTROL						10
		COLUMN PLACARD						10
8B090002		REVIEW CHARTS TO	1	5.	100	100		10
		DETERMINE SPARTAN-						10
		BURG VOR FREQ						10
8B090003		REVIEW CHARTS TO	1	5	100	100		10
		DETERMINE GORDONS-						10
		VILLE VOR FREQ						10
8B110001		REVIEW CHARTS TO	1	5	100	100		10
		DETERMINE PULASKI						10
		VOR FREQ						10
8B140001		REVIEW CHARTS TO	1	5	100	100		10
		DETERMINE TOCCOA						10
		VOR FREQ						10
8B140002		REVIEW CHARTS TO	1	5	100	100		10
		DETERMINE NORCROSS						10
		VOR FREQ						10
8B140003		REVIEW CHARTS TO	1	5	100	100		10
		DETERMINE CHATTA-						10
		NOOGA VOR FREQ						10
8B160001		DETERMINE GO-AROUND	1	5	100	50	50	10
		EPR BUG SET VALUE						10
8B200001		COMPLETE AIRPLANE	1	30	100	50	50	10

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8B090

SUBSYSTEMS	
1A VHF-1 (FFD)	23-21-02
1B VHF-2 (FFD)	23-21-02
1F INTERPHONE	23-42-03
1G PUBLIC ADDRESS	23-31-00
1H GROUND CREW CALL	23-43-00
1J VOICE RECORDER	23-71-02
1M SELCAL	23-28-00
1N TRANSPONDER	34-53-02
1P VOICE	
1Q VHF-1 (AFD)	23-21-02
1R VHF-2 (AFD)	23-21-02
1S VHF-3 (AFD)	23-21-02
1T LOUDSPEAKER	
2H ADV GDC CNTRL SYS (AGCS)	
2J ELEC ATT DIREC INDIC (EADI)	
2K MULTI-FUNCTION DISPLAY (MFD)	
2L NAV CNTRL DISP UNIT (NCDU)	
3A AIRSPEED INDIC	
3F MACH INDIC	34-13-06
3H CORRECTED BARO ALTITUDE INDIC	34-13-04
3J RADIO ALTIMETER	34-30-00
3K ALTITUDE ALERT SYS	34-16-00
3L VERTICAL SPEED INDIC	34-13-01
3M ELAPSED TIME INDIC	31-25-00
3N CLOCK	31-25-00
3P STANDBY ATTITUDE REF INDIC	34-24-00
3Q FLIGHT RECORDER	31-31-02
3R FLIGHT DIRECTOR INDIC (FDI)	34-41-05
3S COURSE INDIC (CI)	34-41-06
3U TOTAL AIR TEMP INDIC	34-13-07
3V APPROACH PROGRESS DISPLAY	34-34-00
3W INSTRUMENT COMPARATOR DISPLAY	34-44-00
4A PRIMARY ATTITUDE CONTROLS	27-00-00
4B PROPULSION CONTROLS/THROTTLES	76-11-00
4C THRUST REVERSER CONTROLS	78-34-00
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4E FLAPS	27-50-00
4F SPEED BRAKES	27-62-00
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4H AUTO FLIGHT CONTROLS	22- -00
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5E ADF/RMI 2	34-57-02
5G VOR/RMI 1	34-31-01
5H VOR/RMI 2	34-31-01
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5K STANDBY COMPASS	34-22-00
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5Q DME-2	34-55-00
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5V VHF/NAV-2 (FFD)	
5W VHF/NAV-1 (AFD)	
5X VHF/NAV-2 (AFD)	
5Y VHF/NAV-3 (AFD)	
6A WEATHER RADAR	34-43-00
6C TELEVISION	
7A HYDRAULIC SUBSYSTEM	29-00-00
7B ELECTRICAL SUBSYSTEM	24-00-00

7C FUEL SUBSYSTEM	28-00-00
7D AIR CONDITIONING SUBSYSTEM	21-00-00
7E CABIN PRESSURE SUBSYSTEM	21-31-03
7F PROPULSION SUBSYSTEM	23-20-00
7G FLIGHT SUBSYSTEM	33-00-00
7H OXYGEN SUBSYSTEM	35-00-00
7J ANTI-ICE SUBSYSTEM	30-00-00
7K RAIN REMOVAL AND DEFOG SYBSYS	30-40-00
7L AUX POWER UNIT	49-61-00
7M ENGINE START CONTROLS	74-31-00
7P FIRE/OVERHEAT/SMOKE DETEC	26-00-00
7Q DOORS	
8A PILOT/COPILOT EXT VISION	
8B MAPS/ CHARTS/CHKLST/REF/DATA	
8C SEATS/SEATBELTS	
8D EMERGENCY EQUIPMENT	
8E PERSONAL EQUIPMENT	

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